

DESIGNS FOR OUTDOOR LIVING

UNIVERSITY
OF FLORIDA
LIBRARY



DESIGNS FOR OUTDOOR LIVING

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

MARGARET OLTHOF GOLDSMITH

DESIGNS
FOR
OUTDOOR
LIVING



NEW YORK, N. Y.

GEORGE W. STEWART · PUBLISHER

624
COPYRIGHT, 1941, BY GEORGE W. STEWART, PUBLISHER, INC.

ARCHI-
TECTURE
BOOK 5604

*All rights reserved. This book, or parts thereof, may not be
reproduced in any form without permission of the publisher.*

FIRST EDITION

GEORGE W. STEWART, PUBLISHER, INC.

PRINTED IN THE UNITED STATES OF AMERICA

VAN REES PRESS • NEW YORK • P. J.

TO
STANLEY UNDERHILL
IN GRATEFUL RECOGNITION OF
THE LONG VIGILS PILOTING THIS
BARK THROUGH PERILOUS WATERS

130300

FOREWORD

OUR PROBLEM AS prospective home owners today is not, "Are we going to have a formal or an informal garden, a house of traditional or ultra modern style, an architectural or 'naturalistic' landscape design?" These phrases are likely to become arbitrarily binding restrictions which free thinkers scorn and conservatives accept without rhyme or reason. In my opinion, the problem we should face is how to plan the home that, in both house and grounds, serves our individual needs, and suits our specific site and climate, our own way of living and our particular combination of beliefs, prejudices and taste. This is a large order. It is more than the average person can undertake without professional guidance. But to help the architect and the landscape architect to interpret all these needs, we must clarify our own point of view. I have gathered together the material for this book from the East and the West, the North and the South, to help us to a wise understanding of what we can do. It is not intended as a set of recipes, but only as a source for ideas and inspiration. To create, not to imitate, should be our slogan.

Underlying every good design for a home runs a spirit which expresses itself in material form. If we look only at the externals, we may draw back and say, "But I don't like tile roofs," or "I don't like small-paned windows," or "I don't like concrete walls," or "I don't like blue spruces," or "I don't like precise patterns of flower beds." In the hands of a master designer, any one of these details can be handled with creative skill and an appreciation for its significance in a given design.

A garden layout that is geometrical, and therefore what we may call formal, can be so casually planted, with trees and shrubs and flowers placed without regard to a set spacing and location, that when you are in the garden you feel it is anything but formal. Blue spruces with pink speciosum lilies and gray artemisia in front of them can raise our spirits out of many a doldrum, when rightly used in a seashore garden of brilliant masses of color. Have you ever noticed that the pattern of small-paned windows at night is much more beautiful inside a room than a large panel of unbroken glass, which registers as a black hole after dark?

It pays to keep an open mind. What we need before we accept or discard a detail is an understanding of the whole thought and the inner meaning to which it contributes.

What is the thought, the philosophy, we may well ask ourselves, that we

want our home to express both inside and out? How much have we in common with the definite trends of living today that are influencing both house and garden design? Here let us enumerate a few of these modern trends:

(1) We want to be out in the air and sunshine of the space around our houses, and we want our children to play happily out-of-doors. This calls for an extension of the house living areas into outdoor rooms, in terms of porches, patios and terraces, which must have enclosures and protection from local climatic conditions to be livable.

(2) We have neither the time nor the money for the upkeep of large lawns and large cultivated gardens. This fact influences the landscaping both in design and materials. It means that ground covers and paving requiring no upkeep are used in designs. It means that trees and shrubs are carefully chosen for their form, foliage and flowers to take the place of large beds of flowers. It means many intimate small gardens, which the owners can care for themselves and enjoy close to their living areas.

(3) We want active exercise out-of-doors, for its recreational value, and where this exercise is not provided by gardening as a hobby, or by the facilities of nearby parks, beaches or country clubs, provision is desirable for such recreational activities as swimming, tennis, games, etc., on the home grounds.

(4) We use cars almost entirely to get from place to place, and we want to drive up to our houses as nearly as possible to the front door or hall, and have the garage conveniently situated to this entrance. A great deal of thought has to be given to the location of motor court and garage, so that guests do not come into the house through or past the service wing of a house.

(5) We want privacy in any outdoor space we live in. This means that if our property is limited in size and we have to choose between having an outdoor space open to public gaze, such as an open front lawn, and space enough for the many outdoor activities we enjoy in this age, we cut down or eliminate the space open to the public, and either locate the house near the front of a lot or enclose the front yard for private use. Furthermore, for the sake of privacy, we locate the outdoor spaces we live in away from traffic to the main entrance or service entrance of a house.

(6) We are conscious of the delights of nature as an antidote to the many burdens of economic life today, and seek to make them an integral part of our homes, both inside and out. We therefore orient the living areas of the home to take advantage of prevailing breezes, sunny exposures, proximity to existing old trees, views, and what we can introduce in the way of landscape material, etc., rather than locate the living rooms at the front of a house according to old conventions. It means we use glass for

wide door and window openings, to bring about a closer relationship between indoors and outdoors. This is possible today even in northern climates, because of improved construction and heating facilities.

(7) We value every cubicle of space immediately adjacent to a house for what it can contribute to the utilitarian and aesthetic side of our home life, since this is the part of the grounds most accessible from indoors. For this reason, plot plans and floor plans are worked out together, interwoven and related, to avoid waste space, waste motion, needless restrictions and separations in exterior and interior areas. We want efficiency in the organization of the grounds in relation to the house just as in our kitchens, according to the new evaluation we put on the enjoyment of the out-of-doors.

When one stops to sum up and analyse these modern wants and the solution of them, one cannot but admit that our philosophy in general is based on a belief in the value of living close to the out-of-doors. It follows that we cannot design a house as a separate entity and then, as an after-thought, consider how to organize the surrounding grounds. If we want to work out plans to the best advantage, we need to think of our whole terrain as a single unit of three-dimensional space made up of smaller units of design, some under roofs and some not, but all related, as our legs, arms and organs are related—actual connected parts of the whole living organism, capable of many necessary human activities simultaneously, through the functioning of these various parts.

We need to fit together interiors and exteriors and landscaped areas into a well-integrated whole. In doing so we are bound to be somewhat influenced by the age we live in, which prizes functional simplicity more than ostentatious display, and freedom of spirit more than the letter of any man-made rule. Our one desire is to make our home serve as a background for living, a stage for our domestic activities, as delightful a background and stage as the combined skill of architect, landscape designer and owner can provide.

By reading magazines we learn what other people, motivated by the same urge, are doing along these lines, but this material is scattered and fragmentary. Almost no books have been written to bring the new trend in landscaping and architectural design together for the lay person. Seeing is believing. By travelling far and wide we can learn much, but that takes time. Pictures can teach us almost as much as travel, if studied with full explanatory details to refer to.

This book, then, built around numerous pictures and diagrams, is an attempt to correlate the whys and hows of designing our houses and grounds so as to get the best use of the out-of-doors.

It could not have been written without the splendid co-operation of the owners and designers who have enabled me to see many of the homes

described, and who have given me access to their plans and photographs and generously discussed various aspects of the problems involved. Among the architects and landscape architects, I wish to thank Robert Law Weed, H. Roy Kelley, J. R. Davidson, Carl Koch, Rose Greely, Maurice Fatio, Oscar Fisher, Harwell Hamilton Harris, Richard J. Neutra, John F. Staub, Henry J. Toombs, Kenneth Day, Mary Deputy Lamson, Florence Yoch and Lucille Council, James C. Rose, Garrett Eckbo, Edward A. Williams, Daniel Urban Kiley, John Byers, Bradford Williams, Christopher Tunnard, Allen G. Siple, Donald Beach Kirby, Ralph Cornell, Hal Hentz, and Ruth London.

For permission to publish material that has appeared in other publications, I make grateful acknowledgment to *The Nation*, *Architecture*, *The Architectural Record*, *House Beautiful*, *The Studio Publications*, *Arts and Decoration*, *California Arts and Architecture*, *Pencil Points*, *Concrete Builder*, *Woman's Home Companion*, *The Magazine of Art*.

CONTENTS

Foreword.	vii
List of Illustrations.	xiii
I Outdoor Rooms: The Patio Idea.	3
II Outdoor Rooms: Porches and Terraces.	28
III Consider the Entrances.	66
IV Organizing the Small Backyard.	94
V Organizing House and Grounds Together.	125
VI The Children's Play Areas.	158
VII Recreational Areas for Adults.	175
VIII Swimming and Wading Pools, Bath Houses and Loggias.	201
IX Outdoor Grills, Dining Areas and Retreats.	223
X Planting in Relation to Living Areas.	249
XI Water in the Landscape.	288
XII Utilizing Natural Features.	314
Appendices	
1. Plant Lists for Special Purposes.	343, 349
2. Sizes of Areas for Games and Sports.	350
Index	353

ILLUSTRATIONS

CHAPTER I The Patio Idea.

1. Living room, looking out, at the I. R. Edmands home in Miami Beach, Florida. Architect, Robert Law Weed	2
2. Patio in Le Petit Théâtre in New Orleans, restored by Armstrong and Koch	6
3. Patio idea in the Long Island farmhouse of Edward Shepard Hewitt, architect, designed by Edward S. Hewitt	7
4. Patio and loggia in Mrs. Peter H. B. Frelinghuysen's Palm Beach home. Architects, Wyeth and King	9
5. Patio in the Miami Beach home of Mrs. E. B. Orr. Architect, Robert Law Weed	10
6. Patio in the country home of Mr. and Mrs. Frank Neely in Norcross, Georgia. Architect, Henry J. Toombs	11
7. Plan of the Frank Neely house in Norcross, Georgia. Architect, Henry J. Toombs	12
8. Plan of the James D. Fulton home in Miami Beach, Florida. Architect, Robert Law Weed	13
9. Patio corner and vista in the James D. Fulton home in Miami Beach. Architect, Robert Law Weed	14
10. The William J. Crabb patio, in Houston, Texas, planned in three units. Landscaped by Lambert Landscaping Co.	15
11. Plan of Clarence Cullimore's home in Bakersfield, California. Architect, Clarence Cullimore	16
12. Corridor in Clarence Cullimore's patio in Bakersfield, California.	16
13. Raised patio in the former home of George Chappellet, in Bel Air, California. Architect, H. Roy Kelley	18
14. View from the George Chappellet Patio in Bel Air, California. Landscape architects, Florence Yoch and Lucile Council	19
15. Plan of combined plot and first floor plan of the John Byers home in Santa Monica, California. Architect, John Byers	20
16. Garden view outside the dining room of the John Byers home, Santa Monica, California	21
17. Patio, showing dining loggia, of Summer Spaulding's home in Beverly Hills, California	22

18. Patio porch, designed by the architect, H. P. Staats, for his own home in Kent, Connecticut	24
19. Plan of the winter home of Mr. and Mrs. Messmore Kendall at Palm Beach, Florida. Architects, Treanor and Fatio	25
20. Curved loggia connecting the two units of the Messmore Kendall house at Palm Beach, seen from the patio	26
21. Bedroom corner and side entrance of the patio in the Messmore Kendall home	26

CHAPTER II Porches and Terraces.

22. Primitive Tennessee cabin with the dogtrot form of porch	29
23. Porch façade of the George A. Hill, Jr. house in Houston, Texas. Architect, John F. Staub; Landscape architect, Ruth London	30
24. Projecting porch at Mrs. Howard Cullman's home near Purchase, New York. Architect, Aymar Embury II; Landscape architect, Marianne Dean	32
25. Porch and woodshed addition in Mrs. Willis Hall's Connecticut home. Architect, Cameron Clark	33
26. Connecting porch in the home of Philip M. Brett in Greenwich, Connecticut. Architect, William Dewey Foster	34
27. Terrace of the W. W. Wilcox home in Middletown, Connecticut. Architect, Leroy P. Ward	35
28. Recessed porch in the home of Donn Jefferson Sheets at New Preston, Connecticut, remodeled by himself	37
29. Porch and terrace at the home of Mr. and Mrs. Morris Cafritz, in Washington, D. C. Architects, Eugene Schoen and Sons; Landscape architect, Rose Greely	38
30. Plan by John S. Burroughs, Jr. of New York	40
31. Plan by John Stencken, of New Jersey	41
32. Plan of Bernard Boutet de Monvel's home in Palm Beach, Florida. Architects, Treanor and Fatio	42
33. Central living-dining room in Bernard Boutet de Monvel's Palm Beach home. Architects, Treanor and Fatio	42
34. Plan by Joseph Shilowitz, of New Jersey	44
35. Sketch by Joseph Shilowitz of southwest perspective of prize-winning one-story house	45
36. Rear terrace at the home of Mr. and Mrs. A. C. Boedeker at Silver Lake, Ohio. Architect, Harry C. Frank	46
37. Detail of recess in the Boedeker porch. Architect, Harry C. Frank	46

38. Porch for both summer and winter use at the Fairfield, Connecticut home of the architect, Cameron Clark	48
39. Porch wing in Mrs. Samuel Watts's home in New Canaan, Connecticut. Architect, Cameron Clark	49
40. Open side of porch wing at Mrs. Samuel Watts's home. Landscape architect, Agnes Selkirk Clark	49
41. Porch of a beach house at Aptos, California; designed by William Wilson Wurster for Mr. and Mrs. Dearborn Clark	50
42. Screened porch in the home of Philip K. Hamilton in Warm Springs, Georgia. Architect, Henry J. Toombs	52
43. A Cape Cod house with screened porch in Scituate, Massachusetts, designed by Royal Barry Wills for Mrs. James A. Ward .	53
44. Residence of Mr. and Mrs. H. B. Macrae in Dallas, Texas. Architect, Hal Yoakum	54
45. Screened porch in the home of Mr. and Mrs. J. E. Yonge in Miami Beach. Architects, Schoeppl and Southwell	55
46. The Palm Springs, California home of Grace Lewis Miller. Architect, Richard J. Neutra	56
47. Plan of country house for Mr. and Mrs. R. A. Malone in South Miami, Florida, designed around a screened porch. Architect, Howard B. Knight	57
48. Four porches in the William J. Crabb home in Houston, Texas. Architect, John F. Staub	59
49. Interior of the Hawaiian room in the new home of George Chappellet in Bel Air, California. Architect, H. Roy Kelley . .	60
50. Inside the living room looking out at the Alfred C. Koch home, Cambridge, Massachusetts. Associated architects, Edward D. Stone and Carl Koch	61
51. Interior of the sunny living and dining rooms at the residence of Mr. and Mrs. Albert Ruben in Los Angeles, California. Architect, Richard J. Neutra	62
52. Conservatory and hall in the Alfred L. Loomis residence at Tuxedo Park, New York, designed by the architect, William Lescaze	64
53. Plan of the Alfred L. Loomis house at Tuxedo Park, New York. Architect, William Lescaze	65

CHAPTER III Consider the Entrances.

54. Entrance court in a North Stamford, Connecticut house, designed by the architect, Coleman Moser, for his own use . .	69
--	----

55. Plan of the Coleman Moser home in North Stamford, Connecticut, designed by him 70
56. Plan of a residence in Great Neck, Long Island. Architect, Hans Worman 71
57. Rear terrace in a house in Great Neck, Long Island. Architect, Hans Worman 72
58. Sketch of Motor Home, designed by Adams and Prentice, for the New York World's Fair 73
59. Entrance front of house in Santa Monica, California, designed by J. R. Davidson for Herbert Stothart 74
60. Plan of the house designed by the architects, Scott and Teegen, for Fritz Kunz in Port Chester, N. Y. 75
61. Sketch of the French Colonial house designed by Daniel M. Hopping, architect, and Margaet O. Goldsmith, interior decorator 76
62. The home of Marshall Cole at New Hope, Pennsylvania. Architect, Kenneth Day 77
63. Plan of the Marshall Cole house in New Hope, Pennsylvania, by Kenneth Day 78
64. Plan of the house designed by the architect, Wellington Cummer, in Jacksonville, Florida 79
65. The terrace façade of Wellington Cummer's home in Jacksonville, Florida, designed by him 81
66. House near Los Angeles, California, designed by the architect, Frank W. Green, for Mr. and Mrs. Frank H. French 83
67. Plan of the Frank H. French house near Los Angeles, California, designed by the architect, Frank W. Green 83
68. The patio in the Frank H. French house near Los Angeles, California. Architect, Frank W. Green 84
69. Entrance and car-port at night, of house designed by Harwell Hamilton Harris for John Entenza in Santa Monica, California 85
70. Plan of the beach house in Santa Monica Canyon, California, designed by Harwell Hamilton Harris for John Entenza 86
71. The Richard S. Humphrey residence in Brookline, Massachusetts, remodeled by J. Hampdon Robb and Gordon Allen. Landscaped by Bradford Williams 88
72. Plan of the Richard S. Humphrey home in Brookline, Massachusetts, remodeled by J. Hampdon Robb and Gordon Allen. Landscape architect, Bradford Williams 89
73. Main entrance at the home of Eugene M. Geddes at Locust Valley, Long Island. Architect, Bradley Delehanty 91

CHAPTER IV Organizing the Small Backyard.

74. Barbecue and badminton court in Carl T. Long's residence at Balboa Island, California, designed by the architect, Donald Beach Kirby 97
75. Plan of backyard in Carl T. Long's residence at Balboa Island, California. Architect, Donald Beach Kirby 97
76. Backyard in the Chester Lincoln residence in San Merino, California. Architect, H. Roy Kelley. Landscape architect, Wilbur Davies 98
77. Stairway and sun-deck at the Chester Lincoln residence in San Merino, California. Architect, H. Roy Kelley 99
78. Sunken terrace around a tree in backyard of the Barton Hepburn residence in Beverly Hills, California. Architects, Webber and Spaulding; landscape architect, Ralph Cornell 100
79. Approach to the sunken terrace at the Barton Hepburn residence in Beverly Hills, California. Landscape architect, Ralph Cornell 100
80. Rear façade of the residence of George A. Brownell in New York City, remodeled by the architects, Harvey Stevenson and Eastman Studds. Planting by Wadley and Smythe 103
81. View of the garden from the dining room of the George A. Brownell house in New York City. Architects, Harvey Stevenson and Eastman Studds 104
82. Terraced backyard in the home of Edward Knoblock in the south of England 105
83. Backyard in the London home of Major K. Christie Miller 106
84. Lady Forres's backyard garden in London. Designer, Oliver Hill 108
85. Raised terrace against the wall in the backyard garden of Lady Forres in London 108
86. Backyard garden in Washington, D. C., at the home of the landscape architect, Rose Greely, designed by her 109
87. Path in the Washington, D. C., backyard garden of Mrs. William Hurd Hill. Landscape architect, Rose Greely 110
88. Mirrors in the wall of the backyard garden of Miss Frances Sortwell in Washington, D. C. Landscape architect, Rose Greely 111
89. Dining alcove in rear terrace of Miss Frances Sortwell's home in Washington, D. C. Niche by Conrad Kramer 113
90. Plan by the landscape architect, Garrett Eckbo, for a city backyard, based on contour curves 116

91. Sketch by the landscape architect, Garrett Eckbo, showing isometric of a city backyard 117
92. Sketch by the landscape architect, Edward A. Williams, for a terrace and backyard garden 118
93. Plan by the landscape architect, Edward A. Williams, for a terrace and backyard garden 119
94. Sketch by the landscape architect, Edward A. Williams, of a patio garden for Carlton E. Byrne in San Francisco, California . . 121

CHAPTER V Organizing House and Grounds Together.

95. Plan of the residence of the architect, Sumner Spaulding, in Beverly Hills, California 130
96. Façade of the home of Sumner Spaulding, the architect, in Beverly Hills, California 131
97. Entrance of the Alfred C. Koch home in Cambridge, Massachusetts. Associated architects, Edward D. Stone and Carl Koch . . 134
98. Looking across the yard to the living room from the foyer in the Alfred C. Koch home in Cambridge, Massachusetts 135
99. The first floor and plot plan by Carl Koch and Edward D. Stone, associated architects for the Alfred C. Koch house in Cambridge, Massachusetts 136
100. View of the terrace and foyer of the Alfred C. Koch house in Cambridge, Massachusetts. Associated architects, Carl Koch and Edward D. Stone 137
101. The George Cukor residence in West Hollywood, California. Architect, J. E. Dolena. Landscape architects, Florence Yoch and Lucile Council 140
102. Entrance at George Cukor's residence, West Hollywood, California 141
103. Terraces and pool at the George Cukor residence, West Hollywood, California 143
104. Terraced hillside walk at the George Cukor residence, landscaped by Florence Yoch and Lucile Council 145
105. Plan by the landscape architect, James C. Rose, for the house and grounds on a river-front acre 147
106. Detail of a flower border and walk in a garden designed by the landscape architect, James C. Rose 148
107. The model of the house and landscape plan designed by James C. Rose for a riverside acre 149
108. Plan for residence of the architect, Edward Shepard Hewitt, at Lloyd's Harbor, Long Island, designed by himself 152

109.	The courtyard façade of the home at Lloyd's Harbor, Long Island, of the architect, Edward S. Hewitt	153
110.	The tiny rose garden in the Edward S. Hewitt home, Lloyd's Harbor, Long Island	155

CHAPTER VI The Children's Play Areas.

111.	Plan of plot and first floor of French Colonial house, designed by Daniel M. Hopping, architect, and Margaret O. Goldsmith . . .	159
112.	Play yard at the Henry Booth home in Westport, Connecticut .	162
113.	Play yard in the home of Dr. Paul Stirling Putzki, Washington, D. C. Rose Greely, landscape architect	163
114.	Cement path in the play yard of Mrs. Charles Ramsey's home in Westport, Connecticut	164
115.	Treehouse at the home of Mr. and Mrs. Harold von Schmidt in Westport, Connecticut	165
116.	Thatched playhouse from Sir Francis Acland's home in Devon, England	166
117.	Playhouse intended later as guest house, for Harold Tandy in Sharon, Massachusetts. Architects, Bradley and Church . .	167
118.	Plan by Clarence W. Jahn and Edwin A. Wagner of Milwaukee, of a prize-winning house	168
119.	Plan by Clarence W. Jahn and Edwin A. Wagner for a small prize-winning house	169
120.	Terrace and house designed by the architect, Frank Lloyd Wright, for Dr. and Mrs. Paul Hanna in Stanford University, Palo Alto, California	171
121.	Playroom in the Hanna home in Palo Alto, California, designed by Frank Lloyd Wright	173

CHAPTER VII Recreational Areas for Adults.

122.	Plan of first floor and grounds of a California house designed by Frederick L. R. Confer	177
123.	Swimming pool and barbecue in a California home designed by Frederick L. R. Confer, landscaped by Ned S. Rucker . . .	179
124.	Multiple-use play court in a concrete driveway	180
125.	Sketch of backstop for tennis court at the Charles MacArthur home in Nyack, New York, designed by the landscape architect, Mary Deputy Lamson	181
126.	Spectator's gallery for tennis court at the home of Arlene Judge, in Beverly Hills, California, designed by Harold W. Grieve . .	182
127.	Sketch of a plywood shelter for a tennis court	183

128.	Ping-pong table, porch and badminton court at the Carl T. Long residence in San Merino, California. Architect, Donald Beach Kirby	184
129.	Bowling green in the Noble Hoggson home in Redding, Connecticut	185
130.	Outdoor dance floor at the home of Norman Peters in Miami Beach, Florida. Architect, Carlos B. Schoeppel	186
131.	Ski trail at Stuart Chase's home in Redding, Connecticut	189
132.	Plan of the recreation house and play court at the Walter S. Wing home in Rye, New York. Architect, Harry Leonard Miller; Landscape architect, Rosalind Spring LaFontaine	190
133.	Recreation house and play court at the home of Mr. and Mrs. Walter S. Wing in Rye, New York. Architect, Harry Leonard Miller; Landscape architect, Rosalind Spring LaFontaine	192
134.	Sketch of a louvred enclosure for sun-bathing	193
135.	Garden entrance and balcony of the J. B. Moos house at Miami Beach, Florida. Architect, Robert Law Weed	194
136.	Ocean side of the James A. Moffett residence in Palm Beach, Florida. Architect, John L. Volk	195
137.	House at Chertsey, Surrey, England. Architect, Raymond McGrath; Landscape architect, Christopher Tunnard	196
138.	General view of Gregory Farm in the Santa Cruz Mountains, California. Architect, William Wilson Wurster	197
139.	Plan of the farm for Mrs. Warren Gregory in the Santa Cruz Mountains, California. William Wilson Wurster, Architect	198
140.	Dining porch at Gregory Farm. Architect, William Wilson Wurster	199

CHAPTER VIII Swimming Pools, Bath Houses and Loggias.

141.	Lowell Thomas's irregularly shaped swimming pool at Pawling, New York	202
142.	The children's concrete swimming pool at the home of Dr. A. L. Barach in Ridgefield, Connecticut, designed and built by Vincent Bedini	205
143.	Construction detail of the children's swimming pool in Ridgefield, Connecticut, showing sloping sides. Contractor, Vincent Bedini	206
144.	Swimming pool and wading pool in an English home at Chertsey, Surrey. Landscape architect, Christopher Tunnard	207
145.	Pool and loggia at the Wolcott Blair home in Palm Beach, Florida. Architects, Treanor and Fatio	208

146. Fan-shaped pool at the home of Herbert Stothart in Santa Monica, California, designed by J. R. Davidson	208
147. Plot plan of the Herbert Stothart home in Santa Monica, California, designed by J. R. Davidson	209
148. Plan of Herbert Stothart house and pool in Santa Monica, California, designed by J. R. Davidson	210
149. Swimming pool at the Alfred E. Lyon home near Stamford, Connecticut	212
150. Victorian bathhouse at the Charles MacArthur home in Nyack, New York. Landscape architect, Mary Deputy Lamson	213
151. Bathhouses and pool at the Howard Cullman farm near Purchase, New York. Landscape architect, Marianne Dean; Architect, Aymar Embury II.	214
152. Eugene Forde's pool house near Los Angeles, California. Architect, Allen G. Siple	215
153. Plan of Eugene Forde's pool house, designed by Allen G. Siple .	216
154. Pond and icehouse at the home of Marguerite Jordan, North Stamford, Connecticut. Landscape architect, Stanley Underhill .	217
155. Detail of the bamboo pavilion for the swimming pool at Waverly Oaks, Massachusetts, designed by Daniel Urban Kiley	218
156. The bamboo pavilion for the swimming pool at Waverly Oaks, Massachusetts. Landscape architect, Daniel Urban Kiley . .	219
157. Swimming pool in the patio at the home of Ernest M. Reinhold, Coral Gables, Florida. Architects, Polevitzky and Russell	220
158. Plan of the Ernest M. Reinhold home in Coral Gables, Florida. Architects, Polevitzky and Russell	221

CHAPTER IX Outdoor Grills, Dining Areas, Retreats.

159. Plan and section drawing of combination fireplace and grill for Mr. Carlton E. Byrne, designed by Edward A. Williams	225
160. Sketch of fireplace built around a cast-iron unit for either wood or charcoal, manufactured by Hancock Iron Works	226
161. The brick fireplace in the home of Corinne Loomis in Duxbury, Massachusetts	228
162. Barbecue and terrace in the home of J. E. French, at Palm Springs, California. Architect, Charles O. Matcham	229
163. The stone fireplace and grill in the courtyard at the home of Stafford Hendrix near Greenwich, Connecticut	231
164. Outdoor fireplace at the home of W. W. Trumbull in Spokane, Washington	233

165.	Outdoor fireplace and oven, designed by the owner, Mr. Ward Wheelock, for his home in Haverford, Pennsylvania	234
166.	Front Elevation and cross section in Ward Wheelock's fireplace	235
167.	Plan of baking slides and warming shelves in Ward Wheelock's grill	236
168.	Luncheon terrace at Mrs. Peter H. B. Frelinghuysen's home in Palm Beach, Florida. Architects, Wyeth and King	237
169.	Dining arbor in a Houston, Texas home. Architect, John F. Staub; Landscape architect, Ruth London	238
170.	Sketch of built-in picnic table and benches	239
171.	Stationary table with natural stone top and log benches, at Mr. H. Brandon Jones' Vermont camp	240
172.	Picnic table in Joseph W. Krutch's home in Redding, Connecticut	241
173.	Hut on the grounds at the Charles MacArthur home in Nyack, New York. Landscape architect, Mary Deputy Lamson	243
174.	Sketch of a plywood garden shelter by the landscape architect, Edward A. Williams	244
175.	Sketch of a rectangular lattice tea house	245
176.	Lath house at the home of Mr. Fred B. Stanley in Beverly Hills, California	245
177.	Bird cages in the lath house of Fred B. Stanley in Beverly Hills, California	246
178.	Garage at the summer home of Ethel B. Power in Gloucester, Massachusetts	247
179.	Outdoor dining terrace and garden at Ethel B. Power's home in Gloucester, Massachusetts	248

CHAPTER X Planting In Relation to Living Areas.

180.	Entrance and Norway maple tree at Louviers, in Wilmington, Delaware, designed in 1811 by E. I. duPont de Nemours, restored by the architects Victorine and Samuel Homsey for the present owner, W. W. Laird	253
181.	A woodland setting for a modern house in North Stamford, Connecticut, owned by Miss Marguerite Jordan. Architect, Coleman Moser; Landscape architect, Stanley Underhill	254
182.	Entrance planting at the home of Fritz Kunz in Port Chester, New York. Architects, Scott and Teegen	255
183.	Entrance of Bernard Boutet de Monvel's Palm Beach home. Architects Treanor and Fatio	256

184. Terrace and planting at the rear of the Guy M. Searcy home in Pasadena, California. Architect, H. Roy Kelley; Landscape architect, Katherine Bashford 258
185. Entrance to the patio and corridor in the Messmore Kendall home in Palm Beach, Florida. Architects, Treanor and Fatio 261
186. Front of the Milledgeville, Georgia, home of Mrs. E. D. Napier, showing appropriate planting. Architects, Hentz, Adler and Shutze 263
187. Entrance planting at the Ernest M. Reinhold residence in Coral Gables, Florida. Architects, Plevitzky and Russell 264
188. Street front of Mrs. Nelson Perrin's home in Pasadena, California. Architect, William McCay 265
189. Entrance from the enclosed courtyard at the former home of George Chappellet in Bel Air, California. Architect, H. Roy Kelley 266
190. Alley of live oaks from the porch at Oak Alley Plantation, Saint James Parish, Vacherie, Louisiana 268
191. Spruces and white birches planted for contrast at the Mount Kisco, New York, home of Miss Anne Morgan and Mrs. William K. Vanderbilt. Garden architect, Nellie B. Allen 270
192. Panoramic view of the terraced hillside at the Charles MacArthur home in Nyack, New York. Landscape architect, Mary Deputy Lamson 271
193. Planting plan for a riverside acre, designed by James C. Rose 275
194. Terrace at the home of Mrs. Francis King in South Hartford, New York 280
195. Terrace behind the garage at the Richard S. Humphrey home in Brookline, Massachusetts. Landscape architect, Bradford Williams 282
196. Landscape plan for Waverly Oaks, Massachusetts, designed by Daniel Urban Kiley 283
197. Sketch of the spiral curve and pool of the Cherry Sweep at Waverly Oaks, designed by Daniel Urban Kiley 285
198. Sketch of the swimming pool and bamboo pavilion at Waverly Oaks, Massachusetts. Landscape architect, Daniel Urban Kiley 286

CHAPTER XI Water In the Landscape.

199. Dipping pool and irrigating ditch in the fruit and vegetable garden of Casa Alvarado, in Coyoacan, Mexico 288
200. Fountain in the music room of the garden in Guadalajara, Mexico, designed for T. Ochea Reyes by Ignacio Dias Morales 289

201.	Pool and built-in brick seat cushioned in woolly thyme, in the Benjamin Follett garden in Hillsborough, California. Landscape architect, Butler Sturtevant	291
202.	Pool in the garden court at Mrs. A. J. Bale's home in Piedmont, California. Landscape architect, Thomas D. Church	292
203.	Lily pool in the courtyard of the George F. Temple home in Santa Monica, California. Architect, John Byers; landscape architect, Benjamin Morton Purdy	295
204.	Lily pond in the outdoor room of the Herbert Stothart residence in Santa Monica, California, designed by J. R. Davidson	296
205.	Wall fountain and pool in the Edward C. Harwood garden in Pasadena, California. Landscape architect, Ralph Cornell	297
206.	Small pool and jets in the Washington, D. C. garden of the landscape architect Rose Greely, designed by herself	298
207.	Terrace and ancient well at Casa Alvarado, Coyoacan, Mexico	299
208.	Small metal wall fountain and basin in the screened terrace at the home of Mr. and Mrs. Lawrence Stern in Bayside, Long Island	300
209.	Bird bath and figure of St. Francis in the evergreen garden at Mrs. Frederick Brewster's home in Dublin, New Hampshire	301
210.	Stone runnel and pool in the Bishop's garden at the Cathedral, Washington, D. C.	303
211.	Reflecting pool for a Houston, Texas home, designed by the landscape architect, Ruth London. Architect, John F. Staub	305
212.	Reflecting pool for a guest house at Mepkin Plantation in Moncks Corners, South Carolina, the home of Mr. and Mrs. Henry R. Luce. Architect, Edward D. Stone	306
213.	Reflecting pool in the Westport, Connecticut garden of Mrs. Meade Prince	308
214.	A reclaimed brook with cascades at the home of Mr. and Mrs. W. L. Marcy Pendleton in Bethel, Connecticut	310
215.	A millpond in Newtown, Connecticut, developed by the owners, Mr. and Mrs. Rea Irvin	312

CHAPTER XII Utilizing Natural Features.

216.	Rocks and pines below the house at the W. W. Trumbull home, Spokane, Washington	315
217.	Pool with native planting at the W. W. Trumbull home, Spokane, Washington	316
218.	Plan of the Atlanta, Georgia, home of Mr. and Mrs. Hal F. Hentz; Architects, Hentz, Adler and Shutze	318

- | | | |
|------|---|-----|
| 219. | Sunken Garden, seen from the east side of the porch, at the Hal F. Hentz home in Atlanta, Georgia | 319 |
| 220. | Summer home of Mr. and Mrs. Englebert Roentgen, Woodstock, New York | 320 |
| 221. | View of Slide Mountain from the Roentgen porch, Woodstock, New York | 321 |
| 222. | Old hemlocks and bench at Deepwood, North Stamford, Connecticut. Landscape architect, Stanley Underhill | 322 |
| 223. | Terrace under the live oak tree at Pasatiempo Guest House, Pasatiempo, California. Architect, Clarence Tantau; Landscape architect, Thomas D. Church | 323 |
| 224. | Pond on the site of an English farm. Landscape architect, Christopher Tunnard | 324 |
| 225. | Duck pond at the North Stamford, Connecticut home of the architect, Coleman Moser | 325 |
| 226. | Lakeside home of Mr. and Mrs. A. G. Sieberts near Portland, Oregon; designed by the architect, Richard Sundleaf | 326 |
| 227. | Corner windows in a guest house at Mepkin Plantation, Moncks Corners, South Carolina, the winter home of Mr. and Mrs. Henry R. Luce. Architect, Edward D. Stone | 327 |
| 228. | Beach house at Aptos, California, designed by the architect, William Wilson Wurster, for Mr. and Mrs. Dearborn Clark | 328 |
| 229. | Shelter and garden at Mrs. John R. McGinley's residence at Manchester-by-the-Sea, Massachusetts | 330 |
| 230. | Corner of the house and pool at Palm Springs, California, designed by the architect, Richard J. Neutra, for Grace Lewis Miller | 331 |
| 231. | Plan of Grace Lewis Miller's home at Palm Springs, California. Architect, Richard J. Neutra | 333 |
| 232. | Library wing of the Richard S. Humphrey home at Brookline, Massachusetts, as seen from the brook. Landscape architect, Bradford Williams | 335 |
| 233. | Brook and slope from the garage terrace at the Richard S. Humphrey house in Brookline, Massachusetts | 336 |
| 234. | Terrace and Blue Ridge Mountains at the Tryon, North Carolina home of Mr. and Mrs. Walter C. Hill | 339 |
| 235. | Outdoor fireplace and porch at Many Levels, Tryon, North Carolina | 340 |
| 236. | View of cactus window garden and terrace at the Walter C. Hill home in Tryon, North Carolina | 341 |

DESIGNS FOR OUTDOOR LIVING



Photo by Samuel H. Gottscho.

1. Living room, looking out, at the I. R. Edmonds home in Miami Beach, Florida. Architect, Robert Law Weed.

CHAPTER I

OUTDOOR ROOMS: THE PATIO IDEA

THE FIRST THING the architect wants to know when you talk of building a house is what needs it must serve for your particular home life, and what space is necessary in your family to solve those needs for cooking, eating, sleeping, bathing, entertaining, working, storing supplies, etc. He has to ask whether you have children, frequent house guests, pets, servants, automobiles and if so, how many, and what accommodations you wish provided for them. Also how much entertaining you do and in what way. You need to discuss these matters before you can decide where to locate the house or what materials you want in the construction. You may change your room requirements later, compromising, perhaps, on a combination living and dining room so as to have a study, but you must have some idea of your spatial needs before you can go very far.

In the same way, the landscape architect, and the architect, need at the start to discuss with you your out-of-door spaces. Do they include a motor court, drying yard, playground for children, recreational facilities for grown-ups, sun-deck or sun-bathing area, outdoor fireplace, lawn, shrubbery, flower beds, summer house, groups of trees, vegetable garden? If so, how much space should be left for such purposes, and where should they be located in relation to the house plan?

BRINGING THE OUTDOORS IN AND VICE VERSA. There are two essential ideas to guide you in making such decisions. On them depend the general character of the whole layout, although in no two homes should these ideas be carried out in exactly the same way.

The first idea is *to bring the out-of-doors into the living rooms*. This means orienting your living rooms, through doors and windows, to take advantage of the best exposures and your most attractive out-of-door spaces. Often it means putting the living rooms at the back of the house or away from vistas of driveways, the street or neighbors' yards, and then planning an attractive outlook, with particular emphasis on accessibility to it. The living space inside the room shown on page 2, for instance, is enlarged in your mental picture of the room by seeing the directly accessible area outside.

The second guiding idea in planning one's whole layout is *to carry the living rooms out-of-doors*. The two ideas work together.

THE TREND IN OUTDOOR ROOMS. America has moved outdoors. Both in modern houses and in traditional houses adapted for modern use, the trend toward living out-of-doors is expressed in three general types of spaces for

the purpose—the patio, the porch, which includes the loggia, and the terrace. Some homes have only one form. Some have more than one. These areas are, strictly speaking, neither exteriors nor interiors, but partake of the nature of both, and whether a house is built around such an area or whether it is built around the house or projecting from it, the outdoor room, regardless of its exact location in the plan, is in its conception a link between the house and the grounds.

There is one essential quality common to patios, porches and terraces, as designed with modern outdoor living in mind. They are all room-sized areas and they have the three dimensions common to rooms. They have a flooring of some sort underfoot, suited to the wear and tear of traffic, weather and continual use. They have walls in some sense of the word to give definition to the area, shelter and privacy. They have something overhead, either a roof or a partial equivalent for the shelter that a roof provides. This may be only a tree or a vine on an arbor, and may only partially shade it. It provides or suggests an intervening canopy between one's head and the sky. The need for something under us, around us and over us in any place intended to make us feel at home, is partly a psychological need. There is nothing less livable than a vast, unbroken flat expanse of ground.

MATERIALS AND FURNISHINGS FOR OUTDOOR ROOMS. The materials used in outdoor rooms, therefore, include both man-made and natural materials. For floorings we may use pebbles, perhaps, set in concrete out-of-doors, as well as stones, turf, brick, concrete, cork, etc. We may use stone and brick for walls, or partial walls and a lattice-fencing around parts of our outdoor rooms. We may use arbors as suggestions of ceilings. We may use many plants, vines, trees and shrubs in outdoor rooms for structural reasons. Thus, we use moss between the joints of a terrace flagging for filling the crevices, a thick hedge as a low wall on one side of a terrace, a tree for partial shade, shrubs in a corner of a patio, a vine growing against one side of a porch for screening there.

The walls, floors and ceilings of our outdoor rooms are more flexible than inside most houses. We may step down from one part of a terrace to another. We may have high house walls only on two sides of a patio, and low boundary walls on the others. A porch may have only a low balustrade across one end. Ceilings in terraces and patios are at best only partial.

We furnish outdoor rooms if they are to be livable, and because of the furnishings they again resemble interiors, although what we use for furniture has to be planned to weather the elements. We demand ease in our outdoor furniture. We want straight chairs or benches around dining tables the proper height for comfort and, if stationary, not too far from the table. We want lounging chairs we can stretch out in. Low benches to put glasses and

books on are indispensable. Some ash receivers and a receptacle for cigarette butts, such as a jar of sand, help save the labor of cleaning up after social gatherings. You will find square or oblong tables more convenient to put books on than round tables, if you want your end tables to be as practical as possible. Some built-in seats are advisable. It is wisdom to seek comfortable, unpretentious designs and durable materials. The two mistakes to avoid are furnishing outdoor rooms so meagerly that no one wants to use them, or crowding them with left-overs and discards from the house, which make them uninviting.

In addition to man-made furnishings for comfort, the porch, patio or terrace brings us close to the natural world, by utilizing plants, trees, and vines to serve many needs. They create masses of color and give out fragrance. They may help direct circulation so as to seclude some area of a patio or porch, or subdivide such an area. The forms of trees and shrubs and vines are needed for the sake of lifting the interest from the floor level, and for balance.

The other element which an outdoor room often includes is some form of water. We are familiar with many of the possibilities—jets, spouts of water falling into basins, fountains, pools, cascades, canals, wells, tanks and bird-baths.

THE PATIO AS AN OUTDOOR ROOM. The idea of treating a space outside a house as a living room in three dimensions, in which to dine, play, work, relax and entertain is not new in this country. It came in the form of a patio to New Orleans when the Spaniards ruled that section of the country. It came to the southwest very early by way of Mexico with the Spanish Mission Fathers, and later with the Dons who influenced what is now called the Early California style of building. It came to the tip end of Florida with the settlers from the West Indies, who brought with them the Mediterranean traditions of building. All these people and those who followed after them adapted the Spanish patio to the local climatic conditions and to other traditions and to the available materials. Today, without imitating and copying the externals in which they clothed this idea, we are finding a use for it because we, too, have the urge to live out-of-doors.

Just what is the patio? As defined by Cecile Hulse Matschat in her book *Mexican Plants for American Gardens*, "the patio in its simplest form is a hollow square open to the sky and surrounded by the walls of the house." The Spanish made it the core of the house, a center for many activities and the basic space for circulating from one part to another, by having all inside rooms open onto the patio without necessarily opening into each other.

Modern designs, of course, have modified this layout and allow passage

between rooms or in halls inside the house rather than relying wholly on the patio for circulation. Modern designs also change and adapt the shape and position of the patio so that it is not always a hollow square completely surrounded by house walls. To appreciate the historic type, you should



Photo by Silvia Saunders.

2. Patio in Le Petit Théâtre in New Orleans, restored by Armstrong and Koch.

visit the old patio of what was the palace of the last Spanish governor in New Orleans, now restored as part of Le Petit Théâtre on St. Peter Street. (See above.) Such a courtyard stays cool because the sun does not have a chance to strike the brick walls for long hours, or to beat down on unshaded pavings as in an unplanted, unenclosed area. There was usually a shady loggia under a balcony at one side of the old New Orleans patios, where people could sit with the splash of the fountain and the greenery around them for refreshment.

WHY HAVE A PATIO? I see the patio idea being utilized in homes today by many who do not know its historic past, but only realize its appropriateness to the modern trend to live out-of-doors, which is the only real test of its validity and the only excuse for adapting it. Do not suppose for one minute that to have a patio you must necessarily live amid waving palms and cocoanuts, in a stucco house with a tiled roof. An enclosed outdoor room, close to the house walls and open to the sky can readily be adapted to white clapboarded farmhouses in the east, if we but realize it is the

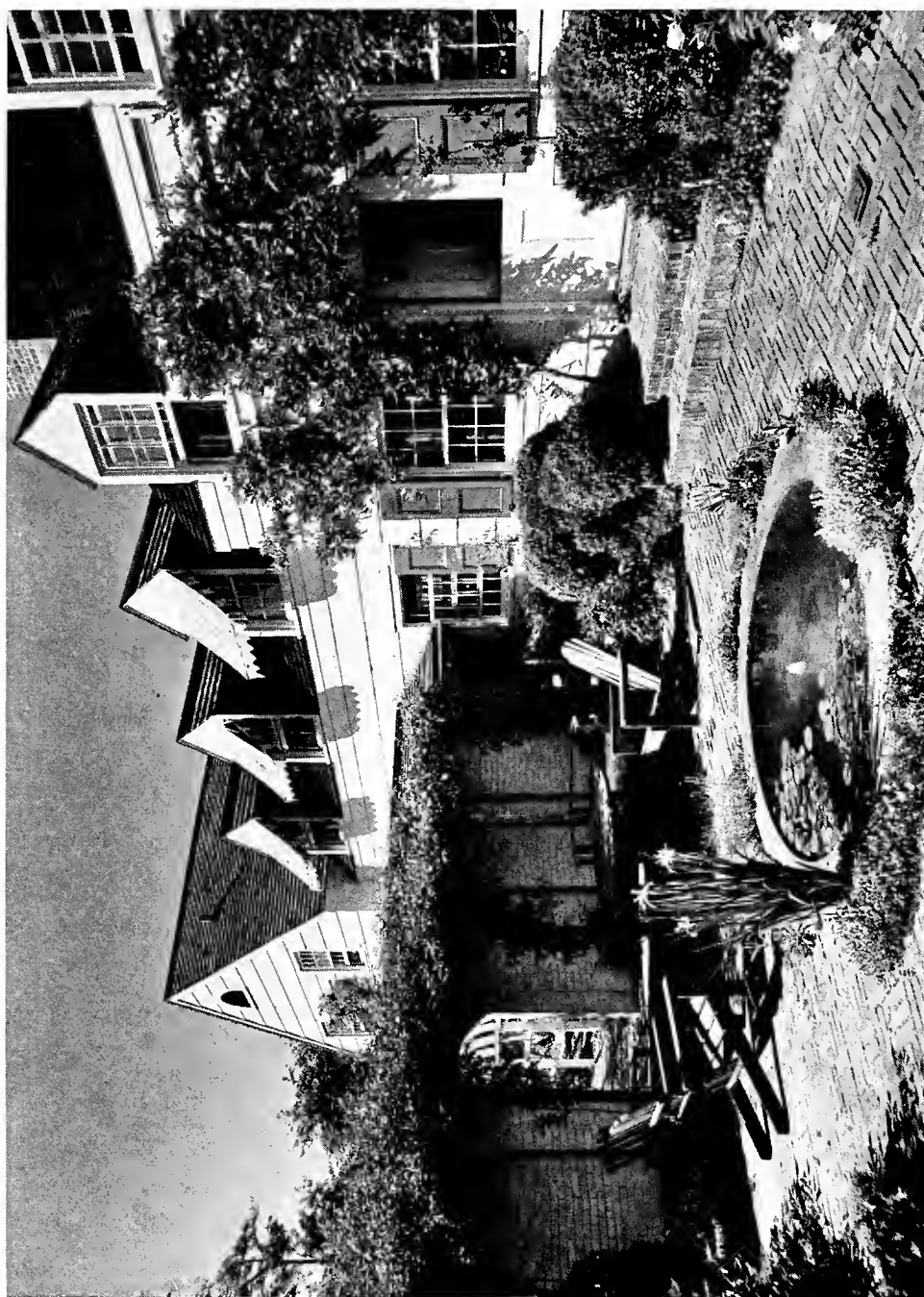


Photo by Samuel H. Gottscho.

3. Patio idea in the Long Island farmhouse of Edward Shepard Hewitt, architect, designed by Edward S. Hewitt.

idea we want to transplant, not the architectural details of the age that originated it. Study the brick-paved courtyard (photograph on page 7) of Edward Shepard Hewitt's remodeled Long Island farmhouse in Lloyd's Harbor, which is described at length on pages 151 and 152 in Chapter V. This secluded courtyard next the south side of the house, enclosed on the west by a high wall of brick, and on the other two sides by a low picket fence, is in every practical sense of the word a patio, envied by all who see it, call it what you will.

The idea is being incorporated in both modern and traditional houses in many parts of the country, and in all manner of plans. We will soon discuss some of these houses. But whether a layout is L-shaped, U-shaped, H-shaped, fan-shaped, a hollow square with a patio at the core, or a rectangle with an enclosed patio at the rear, as seen in the Sumner Spaulding house plan on page 130, the patio itself, if used to advantage for what the name implies, is always an outdoor living room secluded and sheltered from public gaze and so much a part of the house that you pass in and out of it as from one interior room to another, whenever weather permits. If this is the kind of outdoor room that suits your needs, you will want to consider it in planning your house, and you will want to understand how it differs from the other kinds of outdoor rooms.

THE PATIO DIFFERS FROM THE ENGLISH WALLED GARDEN, A PORCH OR TERRACE. The patio differs from the idea of the English walled garden in several ways. It is more of a room in structure and in purpose, and is more closely related to the life indoors because of its location, adjacent to house walls. It is structurally more like a room because you are conscious of actual man-made form in it. You see the equivalent of a floor, of enclosing walls, often as high as our room walls for part of its boundaries, and the equivalent of a ceiling, whether in the way overhanging balconies create some shade, or in the way trees and vines are planted to create natural canopies. Some shade is planned in a patio for human comfort, whereas sunshine is essential in a walled garden in which flowers are the predominating interest. It differs from a terrace in being more definitely enclosed and sheltered for privacy, and it differs from a porch in being open to the sky overhead and in having plants, trees and vines brought into it so that it suggests a walled garden.

HOUSE PLANS BUILT AROUND A PATIO. The best way to understand the way family life goes on with the patio as a center for activity is to study a few of the houses and plans designed around a patio. The plan of the Reinhold house shown on page 221 is really a hollow square, with a central patio in which is the swimming pool, opening into the outer patio also enclosed by structural house walls. The bedrooms with an inside passage line one side

of it. The garage and service wing, with access to the patio through a bar, are opposite the bedrooms. The living room at the front of the house forms a third side, and at the rear an outside stair to the flat roof forms the fourth boundary. There is nothing Spanish about this house, except the idea of a patio for living. Here it is divided into one screened patio for swimming, with an outer one for plants and lounging.



Photo by Samuel H. Gottscho.

4. Patio and loggia in Mrs. Peter H. B. Frelinghuysen's
Palm Beach home. Architects, Wyeth and King.

Often a Spanish patio had a covered loggia backed by a high wall facing in toward it. Such a patio, with Spanish details in the architecture and with large shade trees, is shown (above) in the Palm Beach home of Mrs. Peter Frelinghuysen.

The modern home of Mrs. E. B. Orr at Miami Beach, designed by the architect, Robert Law Weed, is built around three sides of a square (see photograph, page 10), with a high latticed wall toward the motor court forming the fourth wall. A covered loggia serves as a passage-way to the living rooms of the house, and the balcony from the upstairs bedrooms has a simple stairway leading down. While Spanish in its traditional plan, the details of the supporting columns for the balcony, the balustrade at the

stairs, the windows and doors, are all freely designed without regard to Spanish precedent. The flooring is the native quarry keystone, soft in tone and texture. Plants, vines and trees are planted around the edges. It is an ideal spot for entertaining large parties, both in the daytime and evening. Except for a terrace on the waterfront side of the house and a motor court and garage next the street, the house and patio make use of all the space on the property, in a practical way, one advantage for small plots of land.

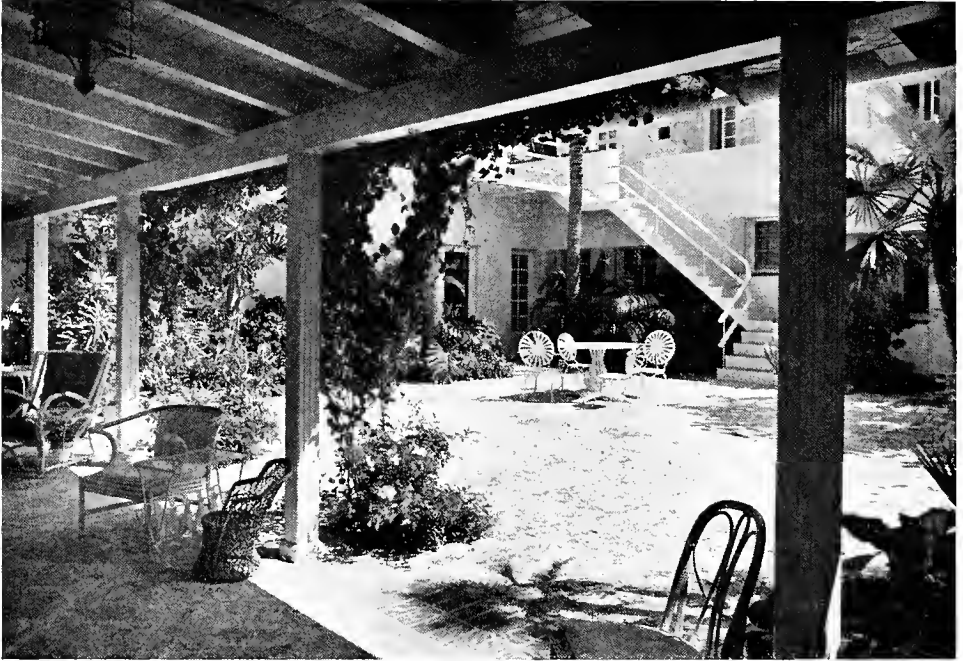


Photo by Samuel H. Gottscho.

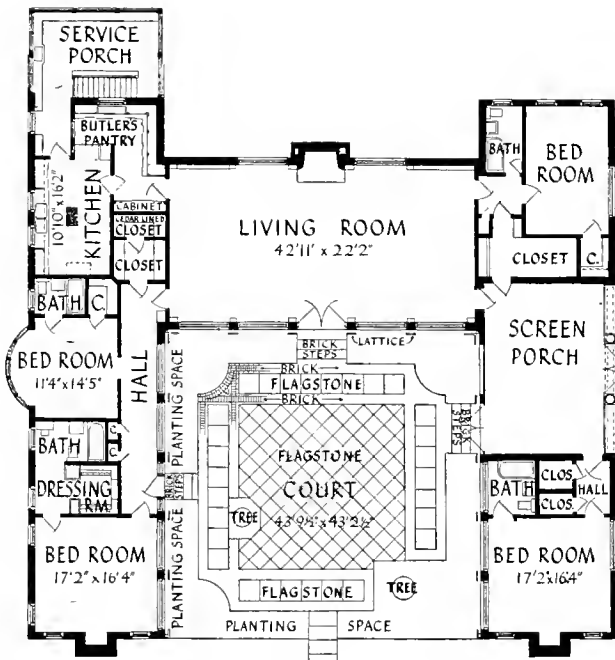
5. Patio in the Miami Beach home of Mrs. E. B. Orr. Architect, Robert Law Weed.

PATIOS WITH VISTAS. Very often, vistas are provided through one side of a patio. In many of the old colonial cities of Mexico, I found the patio open to a thickly wooded grove on the side not surrounded by the house or courtyard walls. In the modern country home of Mr. and Mrs. Frank Neely in Norcross, Georgia, designed by the architect Henry J. Toombs, the patio (shown on page 11) is enclosed on three sides by the low one-story brick structure of the house, but faces out toward the open country and distant hills across a broad terrace, where daffodils are naturalized. Large old trees add dignity and beauty of form to the attractive planting. To breakfast in the spring sunshine of such a setting would be a delight. If you did not know the house was in Georgia, you might suppose, from the architecture and the scenery that it was in New England, where this adaptation would be most acceptable. Note the layout shown on page 12.



Photo by Silvia Saunders.

6. Patio in the country home of Mr. and Mrs. Frank Neely in Norcross, Georgia. Architect, Henry J. Toombs.

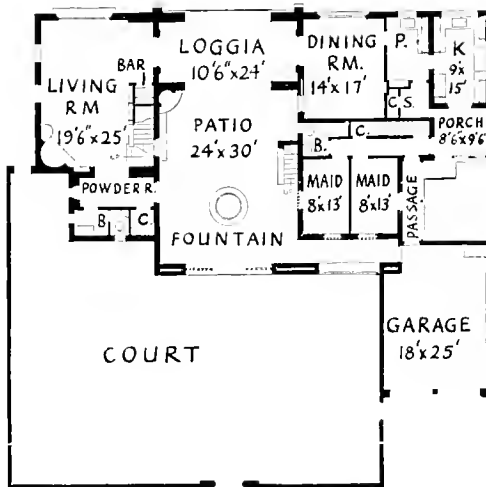


7. Plan of the Frank Neely house in Norcross, Georgia. Architect, Henry J. Toombs

The general plan is an H shape, with the living room across the closed end facing the view, and with bedrooms and a screened porch along the other two sides, although accessible to each other through interior passageways also. While in the east it is not as necessary as in the south to have our bedrooms on the main floor open to a patio, except in summer homes, we do build houses with kitchen wings and garage wings and studio wings, which according to the individual needs could be shaped around a central court and existing trees.

The James D. Fulton house on Allison Island in Miami Beach, Florida, is built in two units, as the plan on page 13 indicates. One unit contains the entrance hall with powder room, and a large living room with three exposures. Above it is the master bedroom, with access to the roof-deck for sunbathing from which ocean views out beyond Biscayne Bay can be enjoyed. The other wing contains the dining room, kitchen and service quarters, with guest bedrooms above reached by an outside stairway from the patio, which lies between these two wings of the house. A two-story, shady loggia forms the connection between the two wings, making it possible to go from one to the other under cover. The arch frames the water vista. The fourth side is a high wall with a gate in it onto the outer court, toward the street. Inside the patio there is complete seclusion from the outer world but accessibility from all the main rooms of the house, and the welcome coolness which persists inside an enclosed court where the sun does not beat so many hours as it does in an unshaded area. See page 14.

The owners of this home chose to have it built according to Mexican traditions, because they felt at home in such a setting and knew it would suit the life winter residents of southern Florida enjoy. I know of no better example in which the spirit and details of the Mexican Casa have been interpreted so simply and fittingly. Here is the low pool, with pots on the broad flat curbing; here is the stairway, with steps for plants decorating the ascent; here are the dramatic arches below the stairs, spanning the lower story of the loggia; here is the upper balcony giving outdoor access to the bedrooms; here in a corner under the stairs is the built-in bench and out-of-door dining table, and in the opposite corner, the out-of-door rôtisserie—all familiar features to anyone who has traveled in Mexico, and useful to anyone who elects the semi-tropical, out-of-door conditions and life of southern Florida today. Native trees, which do not show in the photograph, throw picturesque shadows on the high walls. The seagrape, with its large leathery leaves, is among these, the feathery bamboo, and on the waterfront side of the house a tree as graceful as an olive, the gray-leaved *melaleuca leucadendra*. David Fairchild as a young man first came across this tropical tree on the Java coast, and helped disseminate it in Southern Florida where it has become naturalized.



8. Plan of the James D. Fulton home in Miami Beach, Florida. Architect, Robert Law Weed.

A PATIO DESIGNED IN UNITS. Spanish details appear in the patio view of the William J. Crabb house in Houston, Texas, designed by John F. Staub. (See page 15.) The Spanish vernacular was chosen in this case for the house because Mrs. Crabb is Spanish; but with a Colonial house of clapboards, a modern house of plywood, a Virginia house of brick, or a Pennsylvania farmhouse of stone, the layout would be just as suitable, although



Photo by Samuel H. Gottscho, courtesy of House Beautiful.

9. Patio corner and vista in the James D. Fulton home in Miami Beach.
Architect, Robert Law Weed.



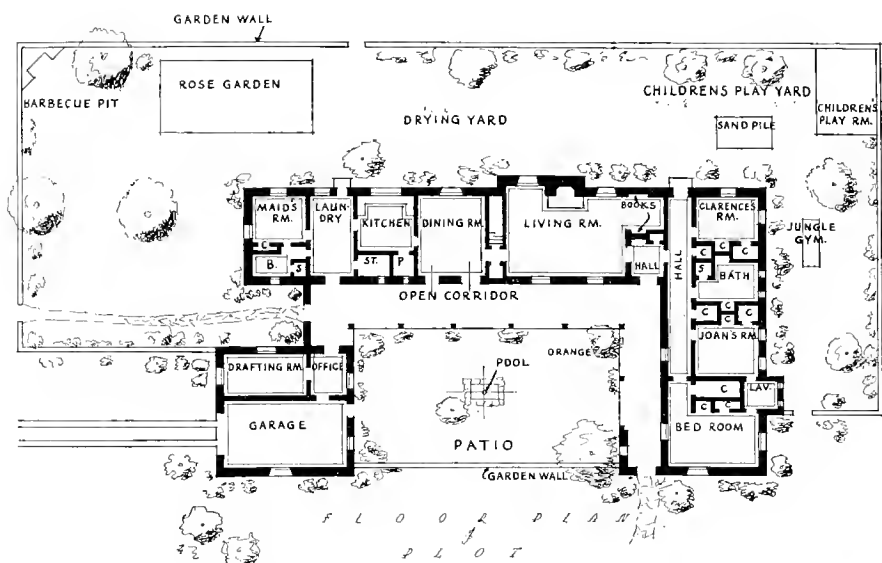
Photo by Silvia Saunders.

10. The William J. Crabb patio, in Houston, Texas, planned in three units. Landscape architect, Lambert Landscaping Co.

the materials for boundary walls would differ. Here the patio is backed by the low one-story dining room. The main house encloses part of one side, and the garage extends a little out from the opposite side. From the house and garage, low stucco walls carry out the boundary lines of the large rectangular patio. It is subdivided into three definite units, each like a separate room, serving a different purpose, each treated in a different way, but all inter-related by the openings from one to the other, and by the paths that give a feeling of movement to the design.

In front of the dining room wing is a brick-paved garden area with central pool, flower beds and borders. Beyond this, on the main house side, is a lawn where games can be played, where the restful effect of unbroken space can be enjoyed as a setting for the house itself. An outside stairway leads down into this lawn from the bedrooms and sleeping porch. A third unit of design is the room-sized terrace out under old pines at the upper left corner of the walled areas, overlooking a formal garden below it. This terrace, where one can get a breeze, is situated a few steps below the level of the lawn and first garden, an excellent device to create interest in a flat piece of ground. The view back to the house is on page 59.

The whole patio has the openness to sun and air and prevailing breezes



11. Plan of Clarence Cullimore's home in Bakersfield, California.
Architect, Clarence Cullimore.



Photo by Edwards Photo Service.

12. Corridor in Clarence Cullimore's patio in Bakersfield, California.

necessary in the climate of Houston. In the season of heavy rains here, any patio that is not well drained and open to breezes would wash out and plants would damp off, whereas in the steaming atmosphere of the hot season, human beings would feel stifled in a small out-of-door room, with high walls preventing circulation of air.

The spirit of the old traditional patterns, which were, essentially, to make the patio livable for the people using it, is carried out here in a way that is modern. You have only to study the layout to realize that while it has balance, it is not symmetrical. It does not force the eye to focus on some one spot of interest all the time. There are many points of interest. You cannot see all of them at once, so your interest is sustained as you pass from one to another. You can see the pattern of the whole composition from the balcony, from which the picture was taken. It is always pleasant to have such a vantage point, but at ground level you are conscious only of being in a more or less enclosed room, in which the landscape pattern is subordinated to living space.

THE MEXICAN STYLE OF PATIO. The architect Clarence Cullimore, has built his adobe home in Bakersfield, California, around an oblong. The plan (see page 16) shows how the house, with its main wing and bedroom wing, forms two sides of the patio, the office and garage wing the third, and a low wall toward the street the fourth. The roofed corridor against the main and bedroom wings of the house affords a shady place for people to sit. (See page 16.) It is cool in the evenings since the patio is away from the afternoon sun. The plan we term Mexican rather than Spanish, because of the open side and because it is not a four-square plan. The adobe construction native to the Indians in the Southwest and to the Mexicans, was chosen because it was economical to use the mud from the cellar excavation, and because heat does not penetrate through eighteen-inch adobe walls. When the sun-dried bricks are stabilized and waterproofed, as here, with modern engineering skill, adobe construction offers not only insulation comfort that is unsurpassed, but also stability and an incentive for simplicity of design in keeping with such a homely material.

A lavender wistaria and honeysuckle twine about the pillars that support the corridor roof. The gate at the far end leads into a side and rear yard, enclosed by a wall and devoted to spaces for outdoor cooking, gardening and for the children's play area, which is well-located and equipped.

THE PATIO OF A MONTEREY HOUSE. A California house planned in a U-shape around a small flag-paved patio is the stucco house designed by H. Roy Kelley in Bel Air. This patio (see page 18) is at the rear of the house, on the level of the interior rooms, only five steps above ground-level at the outer edge, where a low parapet protects one from stepping

off but does not hide the beautiful view. A flight of steps outside the dining room leads to the bedrooms. At the foot of the stairs is a jacaranda tree, in the right spot to carry out the landscape architect's idea of planting just enough trees to pull the house into the landscape and frame the views. It was among the first trees to be introduced into California, and so fulfills the landscape designer's intention, also, of planting here only material with a definite Early California atmosphere—roses, grapes, boxwood, geraniums, ivy, oleander and the graceful olive. (See photographs, pages 19 and 266.)



Photo by George D. Haight.

13. Raised patio in the former home of George Chap-
pellet, in Bel Air, California. Architect, H. Roy Kelley.

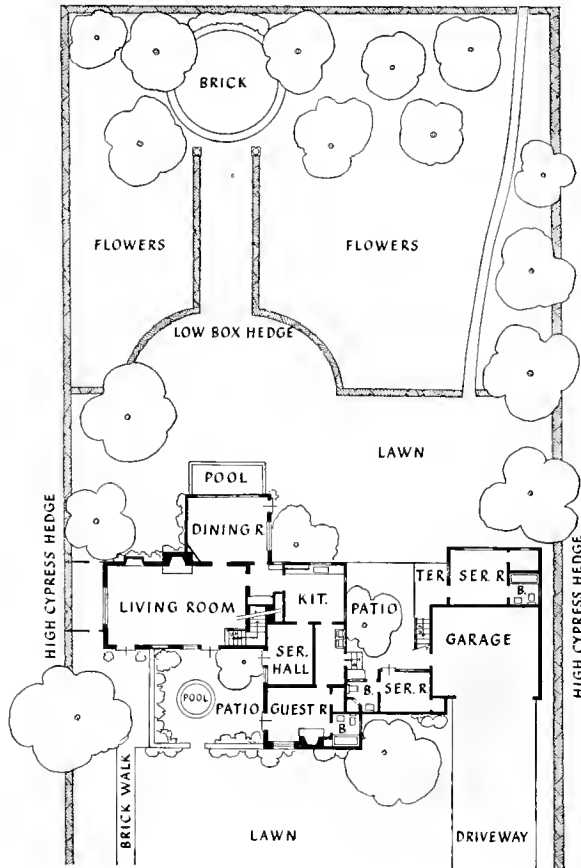
THE SIGNIFICANCE OF THE MONTEREY HOUSE. The landscaping suits the Monterey style of the house, so named because it was first developed in Monterey on the West Coast by the American settlers, who combined such American colonial details as the balcony balustrades and the upper story of wood, with the adobe construction, roof pitch and general plan around an enclosed patio which they found existing in the old haciendas built by the Spanish Dons of an earlier era. Many lasting traditional styles are the product of such a blend of what has been used before, and has proved a good solution to certain unchanged conditions (perhaps those of local climate), with what is developed by new conditions, new materials and new ways of living.



Photo by George D. Haight.

14. View from the George Chappellet Patio in Bel Air, California.
Landscape architects, Florence Yoch and Lucile Council.

The wise home builder keeps mentally alert, and uses the same sense in having a house made to fit him by a good designer as in having an everyday coat made to order, choosing materials and design that make it practical for use and render it appropriate to the rest of his wardrobe and the scene of his activities. Perhaps the designer will use lapels that are a survival of the eighteenth century, a swinging back suggestive of the gay nineties, a belt or fastening that is a brand new composition of this age, and for the material a new weave. If it suits the owner's needs as well as the Monterey house suited the needs of the original builders, the design will be justified.



15. Plan of combined plot and first floor plan of the John Byers' home in Santa Monica, California. Architect, John Byers.

The pity is that in many localities where the inhabitants come into a rich inheritance of local customs, the building style which also expresses that inheritance has been so corrupted and cheapened by commercial real estate promoters that the average person does not consider the possibilities



Photo by Fred R. Dapprich.

16. Garden view outside the dining room of the John Byers' home, Santa Monica, California.

it might hold in the hands of a sympathetic designer. This is particularly true of the Monterey house, which has much more traditional significance for California than the English Tudor, French Provincial, Cape Cod and all the other oddly assorted styles you see adopted there.

VARIATIONS OF THE PATIO. In the hands of good designers, the patio idea is capable of many variations. The architect, Mr. John Byers, has developed his house plan around two patios. One is accessible from the living room, guest room and upstairs balcony, while the other is the pivot for the servants' wing and the outlook for an upstairs studio. (See plan, page 20.) Mr. Byers has given the maximum privacy to the patio on the street side of the house by building the two walls that are not house-walls so high the passerby cannot see over them. He has planned the entrance door of the house at one end of the living room, not accessible through the patio. At the rear of the house the space has been well organized. (See the photograph above.) From a lawn next the house, where a large pepper tree behind the garage wing gives shade for chairs, one looks out onto a

flower garden or down a path, on a line with the dining room window, to a circular brick-paved terrace at the end of the garden, and to the trees informally grouped in twos and threes against the high wall at that end of the property.



Photo by Fred R. Dapprich.

17. Patio, showing dining loggia, of Sumner Spaulding's home in Beverly Hills, California.

SUITING THE DESIGN OF THE PATIO TO THE CLIMATE. Granted that one wants the advantages of a patio, which is the only valid reason for incorporating it into the modern home, one should study how to adapt it to one's local climatic conditions. A patio in Palm Beach will afford shade and a lounging area which can be protected at will from stiff breezes off the water. A patio in Atlanta, Georgia, will have openness for air circulation so it can be used in sultry weather. A New England patio will have some sunshine coming into it and some protection from cold winds so that it can be used in early spring and fall. By varying the size, shape, location and enclosures of the patio you can make it meet your particular needs.

THE STORY OF A PRACTICAL PATIO. When the California architect, Sumner Spaulding, started to build his own home in Beverly Hills, he and his wife

listed as a primary essential an outdoor living room where they could eat, dance, entertain or sun-bathe, as they saw fit. He explains in a letter, published in the *California Arts and Architecture*, how he overcame the great drawback to out-of-door rooms in California. It has general interest because we have the same drawback in many other places all over the country.

"As long as I have been designing houses," he wrote, "I have never been able to persuade anyone that it is possible to live out-of-doors most of the time, providing, of course, the house is planned properly. The sun is always warm in California but the wind, both in summer and in winter, makes it seem cold. So we determined, no matter where our house might be, we would have an outside room with a wall at least ten feet high all around it. In the plan we finally selected, two sides were already formed, one by the house itself and one by the high retaining wall of the terrace on which the house was built. By connecting these two sides we had a place at one end for a dining table and the other side for chairs and a sofa." (See the plan on page 130, and the photograph on page 22.) "Now, fully realizing that there is a short time of the year when it is warm and we might want circulation of air through this outdoor room, we put rolling doors eight feet wide in each end, so that when they are open, we have circulation and can see up and down the canyon. . . .

"The first time we entertained in our patio a terrific fog came up. I was horror-stricken that after all my theorizing, I was to be undone by the weather. All I could do was to try and find an outdoor brazier, and at last I located a two foot crucible, and placing it in the center of the patio, built a charcoal fire in it. By the time the guests arrived, it was full of red coals and our patio was so warm that no one noticed the fog. Since then we have had dinner and danced outside when the ladies were in evening clothes, and I have noticed that ladies, expecting to be cold, were uncomfortably warm in their wraps and one by one removed them. As I write I am sitting in the patio sun-bathing. The loggia doors are rolled together but over the wall I can see the hill tops and the trees waving vigorously in the wind. The New York Philharmonic is coming over the radio and I have a feeling for the moment of being satisfied with the world."

Small flower beds in each corner of this same open area hold the growing plants one longs for in outdoor surroundings, and a drawing of an old Spanish saint, San Ysido, done in the plaster of the rear wall when it was still wet, serves as a mural decoration. It was chosen because San Ysido is the name of the Spauldings' street. The lattice-work between the loggias and the central patio provides support for starry jasmine vines that break the severity of the architectural surroundings and temper the sunlight which can be so bright that the shade inside the loggias is more than welcome.

PATIOS FOR COLD CLIMATES. If one were to build such a patio to the rear of a house in a locality where snowfall is heavy in the winter, one would have to provide for an opening at the rear through which to shovel snow to avoid having drifts block the living room windows. Otherwise it would be adaptable to many square or oblong shaped houses of traditional sloping roofs and wood construction. It has the great advantage of providing a sun-trap and wind protection in early spring and late fall weather, when one cannot use the average porch or terrace.

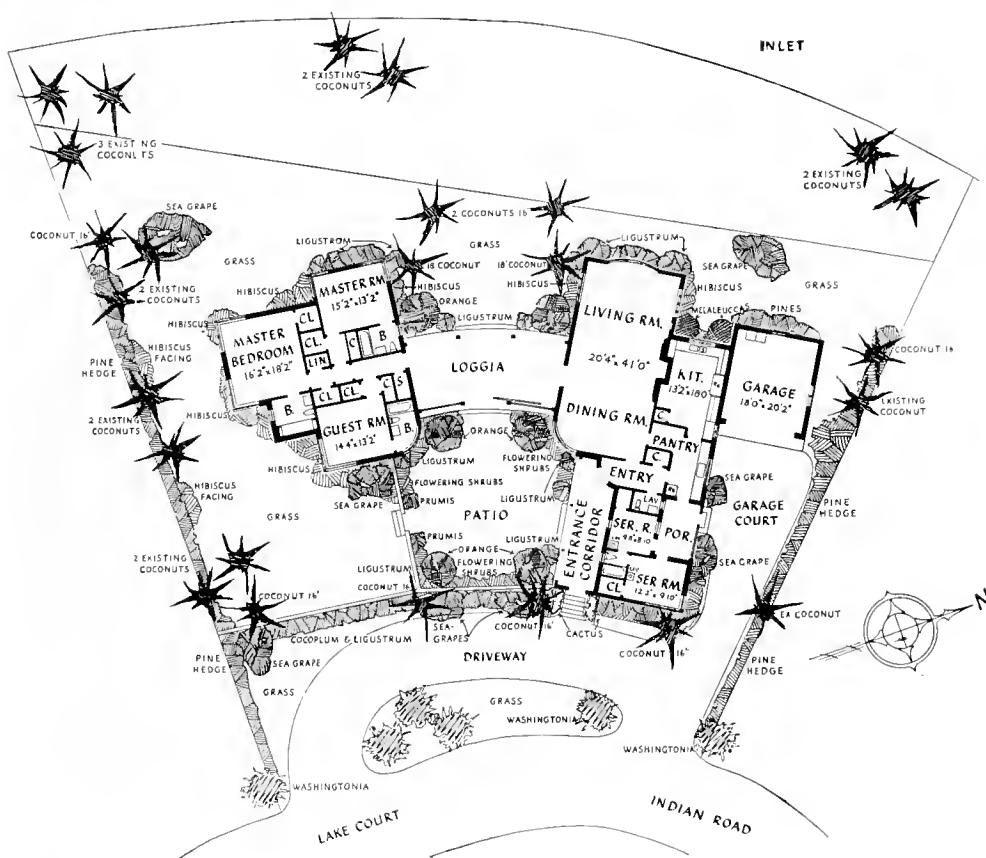


Photo by George Van Anda.

18. Patio porch, designed by the architect, H. P. Staats, for his own home in Kent, Connecticut.

The architect, H. P. Staats, has devised a combination porch and patio in his Kent, Connecticut, home. (See above.) His flooring is flagstone; the rear wall is the house; the two side walls are formed by jogs where wings join the main house. The central area is open but each side area is sheltered overhead by a low sloping timbered roof. In this way he has the equivalent of the loggias in Mr. Spaulding's California home. One end makes a shady, secluded dining room. The fourth side of Mr. Staats's patio has a low retaining wall to mark the drop in grade from a garden a few steps up. Note the large windows with small panes in them, opening onto the patio, bringing views of it into the interior.

If your building lot is very small and you want every inch of it to count



19. Plan of the winter home of Mr. and Mrs. Messmore Kendall at Palm Beach, Florida. Architects, Treanor and Fatio.

for living space, you may like to study carefully the way the front yard of an L-shaped modern house in Cambridge, Massachusetts, has been made a private and much-used patio, as shown by the photograph and plans on pages 61 and 136, proof that the patio idea can be adapted to any style of house and to any part of the country. Wherever a wing goes off at right angles to the rest of any house, the space thus partially enclosed by walls can be further enclosed by a hedge, if you do not want a wall, and inside it, you have privacy and protection. (See the little patio in the house designed by Frank W. Green, on pages 83 and 84.)

A FAN-SHAPED MODERN PATIO. Lest anyone think the patio idea must always be worked out in a rectangular design, I have included the above plan and the photographs on page 26 of a fan-shaped lot with a fan-shaped layout of the house and patio. It is the winter home of Mr. and Mrs. Messmore Kendall at Palm Beach, and shows the forte of the architects, Treanor



Photo by Samuel H. Gottscho.

20. Curved loggia connecting the two units of the Messmore Kendall house at Palm Beach, seen from the patio.



Photo by Samuel H. Gottscho.

21. Bedroom corner and side entrance of the patio in the Messmore Kendall home.

and Fatio, in creating distinguished modern designs. The curve of the inlet from Lake Worth defines the broad edge of the fan-shaped property, and the curve of the driveway defines the inner narrow end of the fan. A pine hedge borders the two sides connecting these curves. The house consists of two one-story units. One contains the entrance corridor, living room, dining room, kitchen and garage; the other is a bedroom unit. A curved loggia connects the two. It overlooks both the water and the patio. Situated between the loggia and the street, the patio has walls of horizontal boarding painted white to complete its boundaries. (See photographs on page 26.) *Ligustrum* shows its glossy green foliage against the light beige color of the house and the white trim. The small scale of this privet suits the dimensions of this small out-of-door room. Giant palms, *Washingtonias*, two delightful *melaleucas*, seagrapes and pines set off the house from outside the patio, but inside it small fruit trees, orange and plum, were planted.

The patio can be a place to bask on blustery days such as Palm Beach can get in mid-winter, because the sliding glass doors of the loggia can be closed to cut off wind from the lake. But on warm days by having these doors open, air circulates freely through house, loggia, and patio. As is often the case in modern Florida houses, the entrance door at the street as shown on page 261 leads to a covered corridor along one side of the patio to a foyer door, and the combination dining and living room is situated away from the street, with a water view. The gardening upkeep for such a house is reduced to the minimum, and the functional quality of the property increased to the maximum.

Many details contribute to the comfort of living in this house. One is the deep overhang that protects the corner bedroom windows from rain and the glare of the sun. Another is the corner exposure of all the bedrooms, which makes for coolness. Then, since this is a one-story house, designed with covered passageways and the patio to connect the various parts, you go in and out of doors a great deal without being conscious of any abrupt transition from one to the other, a very good indication that it is intended for this era of out-of-door living.

OUTDOOR ROOMS: PORCHES AND TERRACES

THERE WERE ENTRANCE porches in Europe long before America was colonized, sometimes enclosed and sometimes open, the roof supported only by classic columns. The latter kind was called a portico. Entrance porches were and still are a convenience while gaining entrance to a house in bad weather. But the porch as an outdoor living room is a distinctly American institution, owing little to European precedent.

One such form of porch, much favored today, we owe to the Dutch colonists who devised their *stoeps* or stoops by bringing out the eaves of their characteristic gambrel roofs over a platform often supported by posts or pillars. In isolated sections of Tennessee you will see primitive log houses built according to local traditions, that have not changed for generations. The kind of covered porch these mountaineers developed is shown in the snapshot on page 29, which holds suggestions for any one building in a warm climate where cool shade is important, and where a side porch such as the Dutch colonists evolved would be too hot. This house has a central open passage running through from front to back, with the upstairs loft carrying over it.

Here many of the family activities take place in summer under ideal conditions for coolness, since the walls that form two sides of it are unheated by the sun and the passage opening through the house draws currents of air into it. Watch-dogs ever on the alert for possible trespassers are generally in evidence on such a porch. The colloquial term for it is "the dog-trot." It serves also as the hallway to get from one side of the house to the other on the main floor.

Recessed two-story porches and projecting porticos on one or more sides of a house, became an important feature in the days of elegance and leisure in the south, where the English Georgian architecture, with its classic details, captivated the taste of the wealthy landowners, fulfilling their desire for formal living in a large-scale house. While classic porticos appeared in fine Georgian houses in the north as well as the south, the southern climate made the portico a practical as well as a design element, and it developed there as a spacious, airy, shady place to sit and to entertain. The variations of it as a projection from many rooms besides the front entrance are endless. The photograph on page 268 shows one of the columns that form the portico on all four sides of an old Louisiana plantation home.

We see a recessed two-story porch utilized for convenience and beauty of effect in the modern Georgian house of brick, designed by John F. Staub,



Photo by courtesy of Stanley Underhill.

22. Primitive Tennessee cabin with the dogtrot form of porch.

in Houston, Texas. (See page 30.) It is accessible from the library, dining room and living room, and helps by means of the doors into these rooms to ventilate them in hot weather. The porch is located to take advantage of the exposure to prevailing breezes. While the sunlit turf and large shade trees and vines make it a delight to sit out here by day, to sit out here of an evening for after-dinner smoking and coffee, when long shadows and moonlight dapple the lawn, is even more enchanting.

The bedrooms opening off the balcony with its delicate wrought iron guard rail are greatly benefited by the airiness possible when the doors are open in sultry weather.

Porticos appeared in the one-story Greek Revival homes after the Revolution throughout the country, when a wave of enthusiasm for the grandeur worthy of our newly founded republic expressed itself in classic buildings. The half-round portico shown at the left of the picture on page 263 is a good adaptation of the portico as a screened porch for a modern home in Georgia, of this early nineteenth-century style. It has privacy from the street entrance, where a recessed version of the portico is used to good advantage.

We have mentioned in Chapter I the loggias of early New Orleans and California houses, based on Spanish traditions. They formed one side of an enclosed patio. The second story balconies that developed in Monterey houses created shade for the downstairs rooms and the porch they served to roof. But if we study the proportions of these and other historic forms



Photo by Silvia Saunders.

23. Porch façade of the George A. Hill, Jr., house in Houston, Texas.
Architect, John F. Staub; landscape architect, Ruth London.

of the porch, we realize that they were often long and narrow, too shallow for groups to congregate on comfortably, if we consider them apart from adjacent open areas where more people could gather. The modern porch recognizes the fact that groups of people do not find it easy to converse, strung out in a long line.

THE MODERN PORCH AS AN OUTDOOR LIVING ROOM. Projecting porches more or less square in shape, with flat or flattened roofs, have evolved in many parts of the country as one way of designing the kind of porch roomy enough for one to entertain large groups out-of-doors, perhaps for cocktail parties or for Sunday night buffet suppers. You can see places for ten people to sit on the part of the porch pictured on page 32, and it will hold as many more. The owner, Mrs. Howard Cullman, has equipped it most comfortably with simple wood and rattan furniture covered with gay-colored sailcloth, as suits the farm setting in the hills near Purchase, New York. Part of the house is pre-Revolutionary, but this modern flagged porch, close to the ground, with a flat roof supported by square wooden pillars and lightened by lattice-work, is proof of the skill with which old and new elements have been combined in the reconstruction undertaken by the architect, Aymar Embury II. From one side the view extends across the lawns toward the swimming pool, shown on page 214. Another vista is down a farm lane toward the pond, and a third takes in the distant out-buildings. The garden, as seen in the immediate foreground, the old trees, informally shaped shrubs, and low ground covers along the brick paths, show the restraint and simplicity with which the landscape architect, Marianne Dean, has achieved results in harmony with the house and the countryside.

ADAPTING WOODSHED DESIGNS FOR PORCHES. Rarely in early New England houses one finds a porch, perhaps tucked under the sloping roof in a corner of the house. Porches for enjoying leisure hours out-of-doors were not in the scheme of living the early houses sought to provide for. But the northern colonists did have the problem of keeping their firewood dry, and of keeping it in a place where in times of storms it could be reached under cover. Their woodsheds and their covered passageways between their houses and outbuildings were the solution. With the modern facilities for heating, the old woodsheds and covered passageways to them might disappear from New England homes of today, if these forms were not being adapted for a new purpose that solves our problem of a porch most efficiently, both in remodeled old houses and in new houses built according to New England traditions.

The photograph on page 33 of Mrs. Willis Hall's combination woodshed, workshop and porch, is a good illustration of this point. It is built

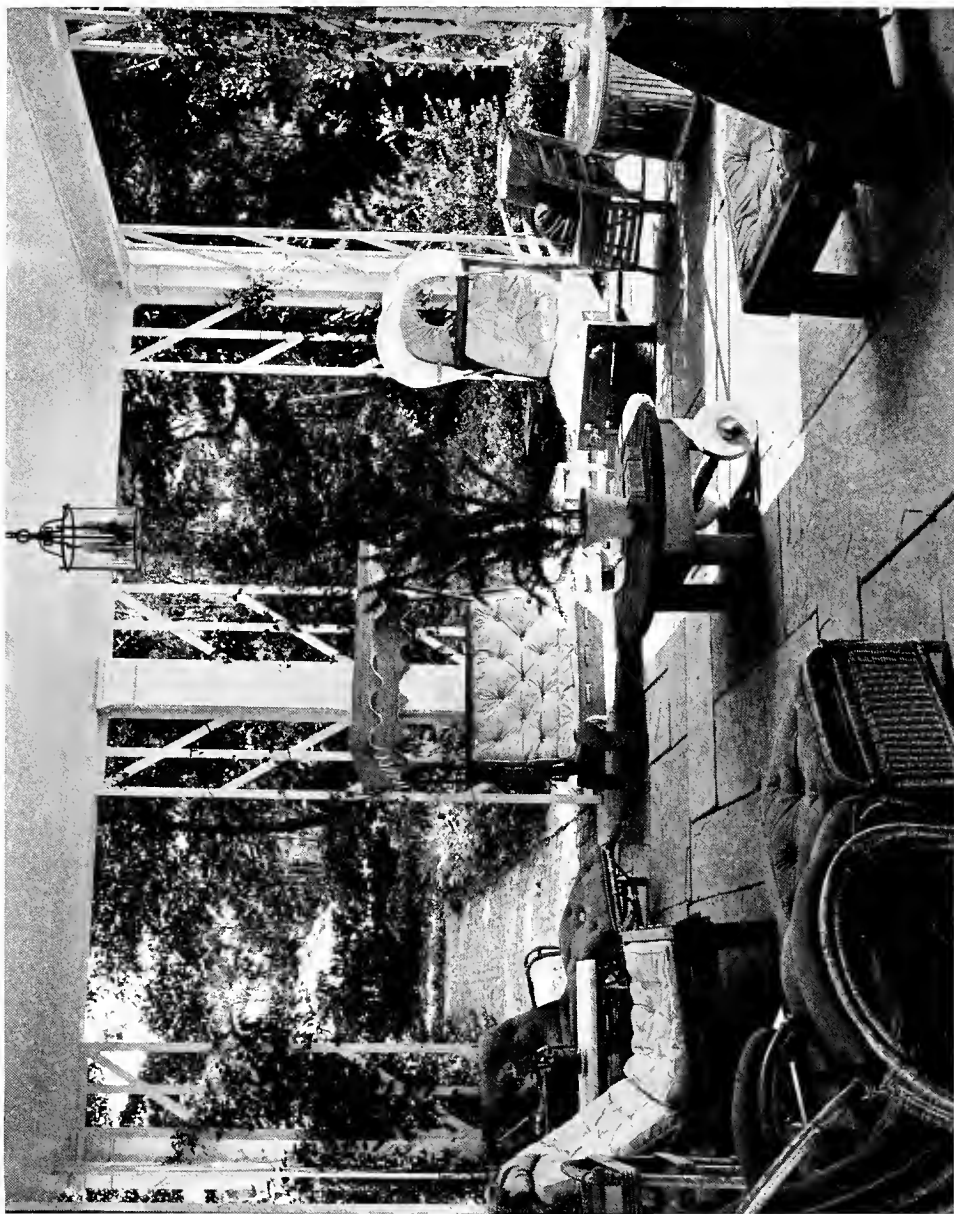


Photo by Richard Averill Smith.

24. Projecting porch at Mrs. Howard Cullman's home near Purchase, New York.
Architect, Aymar Embury II; Landscape architect, Marianne Dean.



Photo by Cameron Clark.

25. Porch and woodshed addition in Mrs. Willis Hall's Connecticut home. Architect, Cameron Clark.

out at right angles to the house, above the terraced garden, where a pergola had originally been intended. The roof slopes down at the back to cover the interior needs. But the porch, open on the long side and one end, has a glorious distant view and the feeling of being in the midst of the flower garden below. It is one of the instances of a high porch that is not awkward and not unrelated to the garden, an exception to the usual high porch because of the situation and setting. Climbing roses and shrubs hide the stone foundation, and grow against the square white pillars that support the roof. A door on the lower level outside the garden gives access to the workshop and woodshed at the back. (See also the screened porch on the Cape Cod house on page 53.

ADAPTING THE COVERED PASSAGEWAY AS A PORCH. The covered passageway between a house and an addition or outbuilding was developed by the colonists in many localities on the Eastern coast, both in simple farm houses and in more pretentious homes. This feature the architect, William Dewey Foster, has utilized with great dignity of design in the Philip M. Brett house, in Greenwich, Connecticut. (See page 34.) Here the arches and columns are classic in proportion, as suits the character of the house and the little octagonal study at the end of the porch. High up in the closed wall of the porch are lattices to let the breezes through on sultry days.

THE TERRACE AS AN OUTDOOR ROOM. The terrace offers us even more latitude than the porch as a center for outdoor living. It can be built without



Photo by George Van Anda.

26. Connecting porch in the home of Philip M. Brett in Greenwich, Connecticut. Architect, William Dewey Foster.

so much expense, since it has no roof and can therefore be much larger and more commodious. Moreover, it can be fitted into areas close to the house without shading the interiors, and assume shapes that would be difficult to treat as porches in the design of many houses. Sometimes a terrace supplements a porch by being located just outside it, as a sort of overflow platform.

But the word itself gives the clue to the nature of the terrace before we ever started transforming it into a livable area for modern needs. It derives from the Latin word *terra*, for earth, and means a raised level shelf or platform of earth supported on one or more sides by a wall. A house on a rise of ground or on sloping ground is often set off by such a level terrace, which thus extends the horizontals of the roof line and relates it to its site. The terrace adjoining the porch of the George A. Hill, Jr. house, shown on page 30, illustrates this point. Such terraces are literally transitional areas between a house and the gardens or lawn below, and were so used by the ancient Romans.

But as an outdoor room, a terrace may or may not be raised. It may or may not serve as a design element setting off the house. It may be located at a little distance from the house to command a view. It is flexible as to its

location, shape and size, and can therefore be adapted to any kind of house. It offers us the same closeness to growing things that the patio does. Some of its disadvantages will be discussed later.

The terrace of the W. W. Wilcox, Jr. home in Middletown, Connecticut, is a good example of the traditional raised terrace on which the house is located. But it is made livable by means of the enclosing brick wall, by the pool, by the introduction of vines, plants and shrubs, as well as the tea-table group of furniture, with the awning for shade. (See below.) I cannot emphasize too much the value of the low wall at the outer edge of this terrace. You would feel unprotected, uneasy, and on the edge of a vast declivity if it were not for this wall. Hedges, rails, rows of potted shrubs, guards of wrought iron, are among the many possibilities which can be used for the same purpose. The psychological effect of such a broad sweep of rolling country and distant horizon is to release the spirit, so long as you feel safely surrounded at your feet. Were this house located in a valley, the barrier would not be so important.



Photo by Richard Averill Smith.

27. Terrace of the W. W. Wilcox home in Middletown, Connecticut. Architect, Leroy P. Ward.

WHY HAVE A HIGH BASEMENT? It is the problem created by a high basement that prevents us from having our first floor level, our terrace or porch flooring and the surrounding grounds at approximately the same level. If you have a high basement under your entire house, you must then decide

whether to have your porch or terrace level somewhere between the first floor level and the ground, or whether to have it line up with one or the other with steps between. Any way you solve this problem, you have at the start handicapped yourself in a serious way if your objective is to have your home a closely related unit of outdoor and indoor living spaces, rooted to the site. For many reasons in the past very different objectives and living conditions have dictated high basements.

Today we require less storage space in cellars than the early Dutch, whose porches were often above ground level so as to adjoin a first floor above a high basement. Our modern heating units do not *have* to be located under the house, as did the early furnaces, in order to function. (See the plans on pages 44, 75 and 168.) It may still be advisable, in certain locations, to take advantage of views by having living floors over a lower story, as in the case of the Cukor home (see page 140). In this house, however, the porch adjoins a downstairs hall, and out in the lawn is a living terrace. It may be practical, in order to get sufficient space for a workroom or laundry, recreation room or garage, to take advantage of a sloping grade to excavate and locate a basement under part of a house. But there are many ways of planning such a basement so that the first floor level is not elevated far above ground level. The photograph on page 91 shows a Long Island home with a cellar under the entire house but the first floor level only a few inches above the surrounding ground. Windows are set in below ground level with recessed areaways in front of them at points where they are not conspicuous because of surrounding trees and shrubs, and where they do not interfere with porches or terraces. They give light but are not needed for ventilating the basement as it is air-conditioned.

Modern devices can take care of the drainage problems around homes today and often prevent dampness in the cellar, which were reasons enough in times past for high basements. Air space under a frame house can be provided without a foundation wall as high above ground level as many builders would like to make you think. I live in a frame house built on two levels about 1720 as nearly as can be ascertained. The cellar was excavated in the slope of the hill under the upper level. The lower level has no cellar under it, and the floor is one step above the level of the ground outside, adjoining the garden and terraces which I have developed around this level of the house. I live in it the year round and keep comfortable. The floor is not cold. Some of the foundation sills, after two hundred years, had rotted and had to be renewed, at no tremendous cost, some years ago. The original flooring on the ground level also had to be renewed, as it had been worn out by generations of hard use. If I were to weigh the pleasure that it gives me to live on intimate terms with my surrounding grounds

against what the few new sills and flooring cost, I would vote every time for the house with at least some living rooms close to ground level.

The modern house built on a concrete foundation needs no air space under it. Study the house described on page 136, where the living-dining room wing rests on such a foundation and has access to the adjacent front yard, used as a living terrace. The cellar under the service wing does not interfere with the living space inside or outside this house. The Palm Springs home described on page 331 and shown here on page 56 rests on a concrete slab level with the desert floor.



Photo by Samuel H. Gottscho.

28. Recessed porch in the home of Donn Jefferson Sheets at New Preston, Connecticut, remodeled by himself.

Certainly you should look into the matter of basements before you build, and if possible avoid a high one, or use some part of your first floor level close to the ground as a living room, with a porch or terrace accessible to it. Do not forego this opportunity for relating your house to the grounds without good reason!

The little recessed porch at Donn Jefferson Sheets' Connecticut home (see above) is just one step above the level of the dooryard garden. In the course of remodelling this old farmhouse, he built it in between a new wing and the end of the original house. By recessing the porch, the owner



Photo by Thurman Rotan.

29. Porch and terrace at the home of Mr. and Mrs. Morris Cafritz in Washington, D. C. Architects, Eugene Schoen and Sons; landscape architect, Rose Greely.

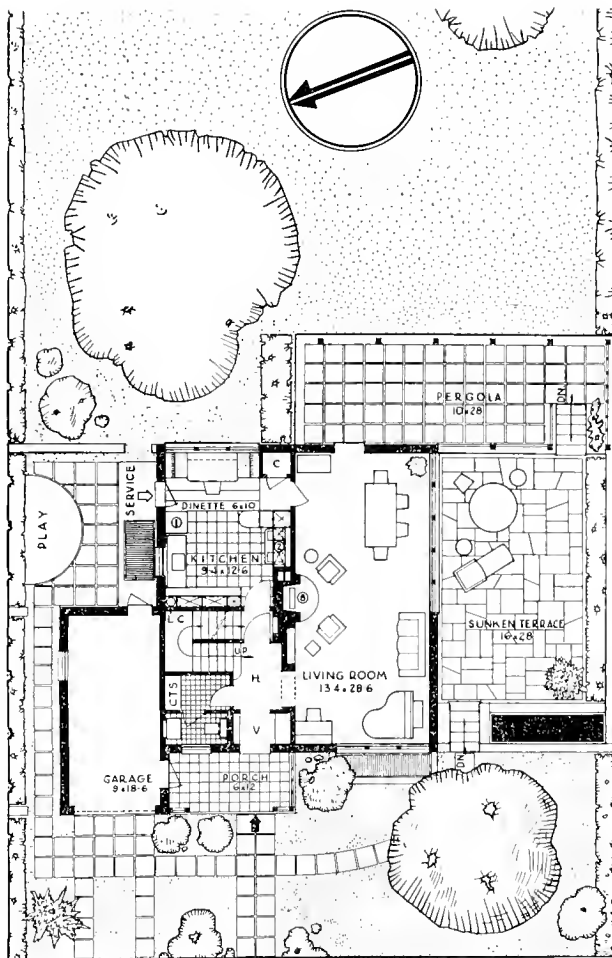
achieved a retreat from wind which means it can be used earlier in the spring and later in the fall, in this sunny exposure, than would otherwise be possible. It has an attractive balcony opening off the bedrooms. This two-story porch is not a reproduction of any authentic old porch in a Connecticut farmhouse. In designing it, the owner used old timbers and rude balustrades structurally consistent with the old traditions. The simple charm and practicality of the little porch are consistent with the spirit of the early homesteaders, which was to incorporate in their own way such innovations as new customs and new usages demanded.

UTILIZING A DROP IN GRADE FOR PORCH AND TERRACE. At the rear of a Washington house designed by Eugene Schoen and Sons, the ground dropped sharply twenty-three feet to a sloping plateau and lawn. The view from all the living rooms over-looking the distant wooded hills on this side of the house was so extensive that the architect designed the five-sided porch outside one of them as an exterior sitting area to enjoy it. (See page 38.)

The first idea for the landscaping outside the porch, was to fill in with earth from the porch level down to the surrounding ground. But the landscape architect, Rose Greely, felt that this plan of an artificial embankment would still leave the house level isolated and stranded above the surrounding land, with its rolling contours. She felt that a happier relationship between house and grounds would result by having an enclosed garden room built out under the porch, repeating its interesting shape, with two flights of steps, one at each side of the whole projection, the curving lines of which would carry down and thus relate the porch to a terrace she suggested below, opening off the garden room and level with the surrounding plateau. Unity of architectural design is maintained by the iron rail for the steps designed by Mr. Schoen repeating the modified Greek fret motif of the porch.

The planting fills in perfectly the difference in the grading where the stairs come down. It consists of American holly, one English holly, pyracantha and yew, with higher shrubs behind, so that from the front of the house you do not suspect that this sharp drop exists. The terrace is fan-shaped, to widen the overlook at one end. It is paved, except where an apple tree has been set in for shade at one side. A small rose garden, with a cutting garden around the edge, brings flowers close to the attention as you sit enjoying the view. A magnolia is to be planted in the rose garden to relieve the flatness. Miss Greely has planned the landscaping so that there is something in the way of bloom or berries for every month in the year.

A TERRACE NEXT A BASEMENT PLAYROOM. Seclusion, accessibility and spacious proportions are all advantages the terrace can provide if well located with these objectives in mind. The architect, John Burroughs, Jr., of New York, has incorporated a sunken terrace outside a basement playroom

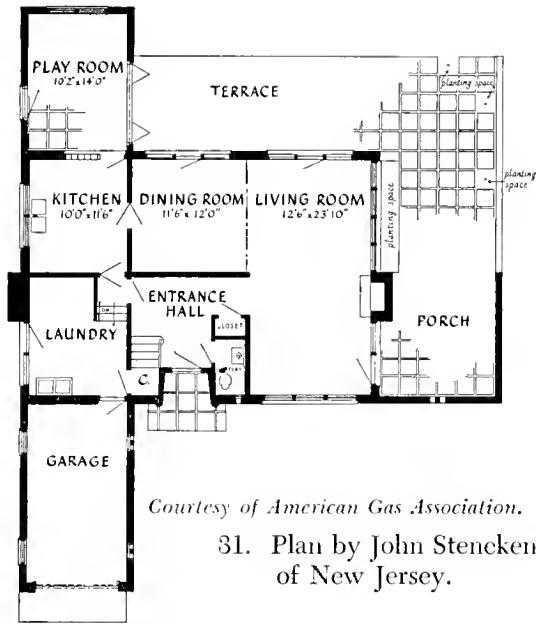


Courtesy of American Gas Association.

30. Plan by John S. Burroughs, Jr., of New York.

in the plan above, which won a prize in the recent competition offered by the American Gas Association. The house is intended for a lot 69' x 130', and it includes almost as much living space in out-of-door rooms around it as under the house roof. The large terrace off the basement (16' x 28') is out of sight from the street, hidden behind trees and a wall above the level of the front lawn. It is shaded at the back by the pergola, which is on the living room level. Steps down from the front lawn and from the rear pergola, as well as access to the playroom, mean that people can easily reach this terrace from several directions.

A CONTINUOUS TERRACE WITH TWO OR MORE EXPOSURES. The question of where to locate one's porch or terrace depends on many factors—whether it will be more useful mornings, afternoons or evenings, where your prevailing breezes come from, how it will fit into the interior plan the best, or

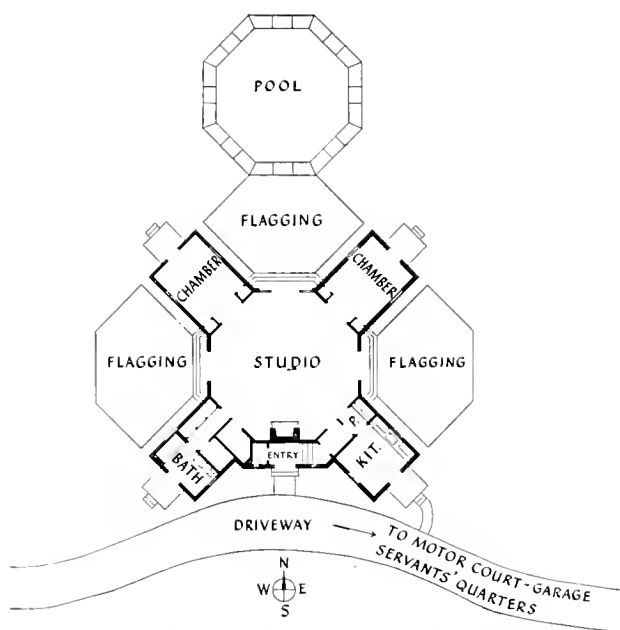


Courtesy of American Gas Association.

31. Plan by John Stencken,
of New Jersey.

where your view or your garden can be seen from it. Sometimes the best solution seems to be to have a continuous terrace around two or three sides of the house, so that you can move to get or avoid the sun, depending on the season. The architect, John Stencken, of New Jersey, has adopted this course in his prize-winning plan shown above. His plan shows a covered portion of the terrace or porch outside the fireplace end of the living room. The unroofed section continues around the corner and past the dining room. It terminates at the playroom. The old-fashioned covered porch of the 1900's used to go around a house in this way, but it darkened all the inside rooms and was seldom as wide as these modern terraces.

AN OCTAGONAL HOUSE WITH FOUR TERRACES. The artist, Bernard Boutet de Monvel, solved his terrace requirements by having four. The south one is the entrance court (see page 256); the north terrace is for a swimming pool (see the plan on page 42); the east, completely surrounded by a high hedge, is for sunbathing, and the west is to enjoy the view over a nearby meadow of wild pink and white vinca major, and a golf course. He had stipulated, when he discussed his winter home in Palm Beach with the architect, Maurice Fatio, that he wanted privacy and a studio with a north light, and that he had a penchant for a house which would not be irregular in shape but a pure geometrical form. This last stipulation might have proved a cramping restriction to some architects, but inspired Mr. Fatio to create an ingenious octagonal house, most efficient for its purpose, Modern Regency in feeling, with a central living-dining room and four small square rooms projecting out from it, from alternate sides of the central octagon. The space left between these projecting wings formed the four terraces,



32. Plan of Bernard Boutet de Monvel's home in Palm Beach, Florida. Architects, Treanor and Fatio.



Photo by Samuel H. Gottscho.

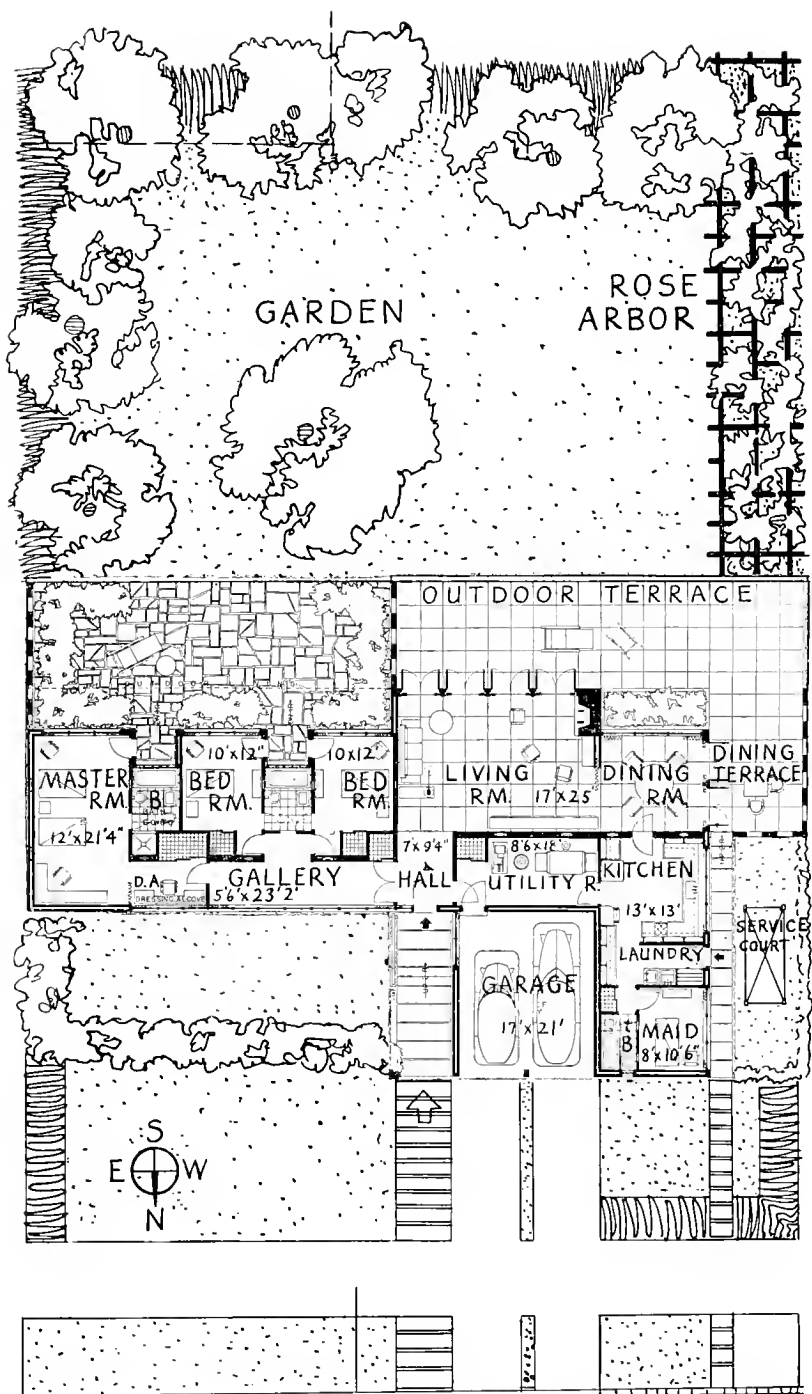
33. Central living-dining room in Bernard Boutet de Monvel's Palm Beach home. Architects, Treanor and Fatio.

each with house walls on three sides, as the plan indicates on page 42. Privacy was assured the owner by the location of the property on a solitary hilltop, so rocky that the holes for the palms, set to emphasize the shape of the house (two in each terrace), had to be blasted.

The studio-dining room shown on page 42 is an extraverted room in a most attractive way. It looks outside through three sets of glass doors under half round arches, one pair of doors onto each of the living terraces. The glass doors that lead into the little hallway to the kitchen and front door, and those that open into the dressing room, and bedrooms, have mirrored panes reflecting like windows. The interior treatment, with the wood flooring following the shape of the room and continuing in horizontal courses up the walls to merge with the lofty ceiling, has somewhat the quality of the cypress groves from which the wood came. The uncluttered simplicity of the interior, depending on this beautiful natural wood, the brilliant blue glass top for the central table, the light summery rattan furniture and the tree forms of my favorite palm, the fishtail, in tubs here and there, all contribute to the outdoor atmosphere. The plan and treatment should be stimulating to anyone considering a week-end or vacation house.

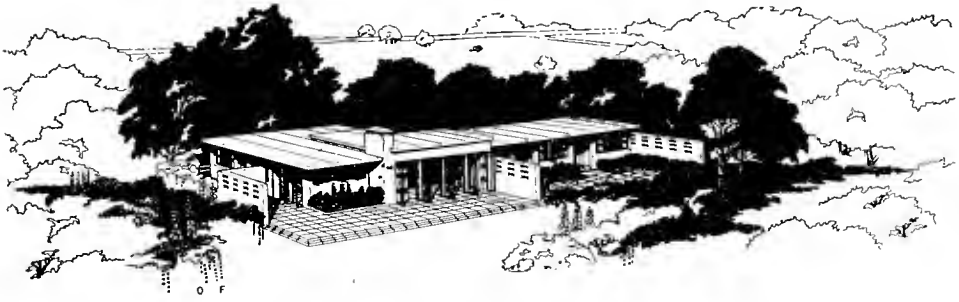
OPENNESS OF PLAN BETWEEN INTERIORS AND TERRACE. On a lot 100 feet or more wide by 175 feet deep, the New Jersey architect, Joseph Shilowitz, has planned an L-shaped one-story house, with the longest wing running across the property, as shown on the plan, page 44. The wing toward the street consists of garage, maid's room, kitchen and utility room, thus leaving the long, sunny southern exposure toward the rear free for living rooms, bedrooms and terraces. The house is designed to hug the ground and assume the long, low horizontal lines that suit the Jersey landscape. (See sketch, page 45.) Both dining room and living room have a whole side that consists of steel casement doors, onto a broad, flat terrace on the same level. When these doors stand open, the interior is expanded to take in the exterior living and dining space. We may think such openness of plan can be practical only in a southern climate. Such is not the case these days. All the bedrooms on this floor have access also to an out-of-door terrace. A feature of the bedroom terrace, well worth studying, is the introduction of flower beds around the edge. They are 2½ feet deep and have 6-inch cement curbs. The same kind of flower bed stretches across the width of the dining room, below the dining room windows on the southwest end of the terrace. *Polyantha* or *floribunda* roses would bloom here all summer.

PLANTING IN THE TERRACE. This method of planting represents the modern idea of getting the most pleasure from flower beds with the least upkeep, by bringing the garden close to the house, where small-sized beds count for more than if seen from a distance against the larger scape of a natural set-



Courtesy of American Gas Association.

34. Plan by Joseph Shilowitz, of New Jersey.



35. Sketch by Joseph Shilowitz of southwest perspective of prize-winning one-story house.

ting. The yard can then be given over to recreational facilities, with trees and flowering shrubs as the chief elements of the composition.

THE PROJECTING TERRACE. Instead of locating a porch or terrace within the frame of the lines of the house, the opposite plan is to extend it out from the house, with three sides from which to enjoy the surroundings. That is the plan so admirably carried out by the architect, Harry C. Frank, in the stone house built for Mr. and Mrs. A. C. Boedeker at Silver Lake, Ohio. The terrace, shown on page 46, runs across the rear of the house, and is reached through a door off the living room, but can be seen through the dining room and kitchen windows. The fact that the service door into the kitchen is around the rear corner at the side of the house, leaves this whole terrace free for a living space. It overlooks flower gardens and native dogwoods, on a series of terraces ending at the lake front. A close-up as shown on page 46 of the little roofed recess of the terrace outside the living room door, with the wood for the fireplace close at hand, is about as good an advertisement for a terrace open on three sides as anyone could ask. There is a tiny pool and fountain close to the living room windows, and a table for convenient out-of-door dining near the kitchen corner and service entrance.

AN UNSYMMETRICAL TERRACE. As a pleasant and imaginative change from a symmetrically rectangular porch, mathematical in its four square corners, take a look at the plan the landscape architect, Mr. James C. Rose, has worked out for a river front home, on page 147. This modern designer wishes to carry out the idea of a house flowing out into the surroundings, without one being conscious of sharp boundary lines between terrace and grounds. He surrounds two sides of the house with terraces. The one with tiled pavement in squares, is intended as an eating and living terrace. It has a high wall of brick toward the entrance drive, and a low retaining wall and balustrade of brick toward the beach. He has used a low hedge partially to separate the living from the dining section of the porch which is accessible to the kitchen.



Photo by Bodie's Photo Service.

36. Rear terrace at the home of Mr. and Mrs. A. C. Boedeker at Silver Lake, Ohio. Architect, Harry C. Frank.



Photo by Bodie's Photo Service.

37. Detail of recess in the Boedeker porch. Architect, Harry C. Frank.

The living room of the house has two walls of glass, surrounded with a stone flagged terrace. There is an arbor on the long side (see the model on page 149.) These terraces continue as paths around the lawn, so that again one area of space flows out into another, without sharp boundary lines, and thus contributes to the feeling of great spaciousness. The lack of exactitude in the shape of the terraces is in keeping with the natural setting. It has not been overdone, but subtly contributes to the oneness of the house and grounds. Other details of this plan are discussed in Chapter V on page 146.

THE DISADVANTAGES OF A TERRACE. The great disadvantages of the ordinary terrace are that it cannot be used in winter time in a cold climate, and it offers little protection from wind, rain or insect pests if these happen to be frequent deterrents to outdoor living in your locality. The porch scores in that it can be more readily adapted to meet these objections, and while I would not for one minute abandon the idea of a terrace for a house plan, I believe there are many homes where a porch would supplement it to advantage. The terrace of a Long Island home shown on page 300 solves the problem of insects by a screened pergola over two-thirds of the area and a roof over the rest as protection from rain.

THE CONVERTIBLE PORCH. Living as I do in Connecticut, the coming of fall means that I have to give up using my three out-of-door terraces, and contract my living quarters to the restricted area of my little cottage. And I confess I do not relinquish my summer living rooms gracefully. I want them in winter, too. Even one would be a help. Other people beside myself have longed for a porch as convertible as an automobile, for both summer and winter use. Such a porch has been successfully worked out by the architect, Cameron Clark, in his own home in Fairfield, Connecticut. (See page 48.) Part of the roof is the shingled roof of the house brought out at the rear. From this a framework like an arbor carries the roof line down and out about six feet, and is supported by square wooden pillars. A wistaria has grown over this framework and helps shade the porch in summer. But in the fall, there are sections of glass sash which can be fitted over the rafters and between the posts at the side and ends, completely enclosing the porch. Furthermore, there is a radiator which can be installed under the sash to warm the room thus devised. It takes only a day for the labor of converting the open shaded porch of summer into a conservatory which is flooded with sunshine, after the leaves fall and the sun is low in the heavens. Naturally, Mrs. Clark has vines and plants to make what is her study a bower of growing things all winter. Unlike most conservatories, it is so carefully planned that it contributes greatly to the appearance of the building. And the advantage over a conservatory is that the glass roof and walls can be removed in hot weather.



Photo by Cameron Clark.

38. Porch for both summer and winter use at the Fairfield, Connecticut home of the architect, Cameron Clark.

THE PROTECTED PORCH FOR COLD CLIMATES. A projecting porch, open on three sides, such as the one described on page 32, is of course not useful on windy days or in early spring and fall, in anything but a temperate climate. There is a great deal to be said for the porch that is built out like a house wing, protected in some way, perhaps by folding glass doors on all but one side. It can be designed to conform to the building traditions of almost any kind of house, and is practical in severe climates. For example, the interesting porch wing of brick and timber built out from the living room in Mrs. Samuel H. Watts' English style stucco house in New Canaan, Connecticut, has been ingeniously fitted with folding shutters at large openings of window size, at the back and at one end. (See page 49.) These can be closed on blustery days or in winter, and left open for the views and circulation of air on hot summer days. The open side, only one step above ground level, has a flagged terrace with trees and flower beds around one end, making a delightful place for tea in pleasant weather. (See photo, page 49.) The problem of storing out-of-door furniture during rainy weather is a nuisance, unless one has some place near an open terrace to which chairs or divans with cushions and canvas seats can quickly be transported to keep dry.

GLASS FOR WIND PROTECTION. Where winds are a menace, we can have sliding panels of glass to shut off drafts as desired. Look back at the loggia



Photo by Cameron Clark.

39. Porch wing in Mrs. Samuel Watts's home in New Canaan, Connecticut. Architect, Cameron Clark.



Photo by Cameron Clark.

40. Open side of porch wing at Mrs. Samuel Watts's home. Landscape architect, Agnes Selkirk Clark.

with sliding panels in the Messmore Kendall home, described in the last chapter, page 27. Or we can have fixed glass panels enclosing one end or section of a porch. William W. Wurster has planned this arrangement in the beach house shown below.



Photo by Roger Sturtevant.

41. Porch of a beach house at Aptos, California; designed by William Wilson Wurster for Mr. and Mrs. Dearborn Clark.

THE SCREENED PORCH—NECESSITY FOR IT. There are sections of the country where the only comfortable porch is the screened porch at any hour of the day. Mosquitoes in my section of New England are not noticeable during the day but have an evening shift that goes on duty promptly at sundown. I prefer open terraces to live in, except for the evening hours, so the eventual solution of my problem is to have a small summer house screened on the knoll where the grill is, but to keep the terraces near the house unroofed and unscreened for use the rest of the time. In some sections flies and wasps are the great nuisance and, of course, swarm wherever food is being served, so that the outdoor dining porch must be screened to be endurable. See the Florida porch on page 55.

THE OBJECTIONS TO THE SCREENED PORCH. We screen reluctantly for two reasons. One is that the screening itself looks black when installed, not transparent like glass, so that from outside, the enclosed porch looks part

of the enclosed house, and from inside, while you can see through the mesh, you are conscious of a barrier you wish were not there. New materials for screening will probably remedy this, in part. The monel screening discussed on page 221 for a Florida patio does not blacken on exposure to the weather as copper does.

The second objection to screened porches is that the shape of the openings and subdivisions made by big-scale ugly framework, usually painted white, is generally unrelated in design to the house and utterly lacking in any architectural distinction. This can certainly be remedied if the need for it becomes apparent. We spend no end of trouble trying to get our doorways, our window openings, our various wings related in line to the whole house and pleasing in themselves, but we seem to think that a big porch is invisible because we inside it are almost invisible, and not worth having designed by the architect if we can procure the abominable stock screen doors and panels that a lumber-yard will turn out, and so save a few dollars. That is penny wisdom and pound foolishness! Professional skill in the details can redeem the situation.

IMPROVING SCREENED PORCHES. A screened porch does not have to be a blot on the landscape. Look at the one on page 52 from the home of Philip K. Hamilton in Warm Springs, Georgia, designed by the architect Henry J. Toombs. It has a design related in the materials, lines and general style to the house. The spacing and size of the whitewashed brick piers between the screened openings are such as to suggest free standing columns, most appropriate to a brick house in the South. The supporting crossbars and uprights inside it are small enough in scale not to stand out. I wish there was a law that made it prohibitive to screen porches without having the verticals that mark the main divisions architecturally satisfying, and the openings well proportioned, and the needed supports made of secondary importance by scaling them down. Moreover, it should be a law that the crossbars be located low enough or high enough so they do not come right in your line of vision when you sit or stand inside the porch. In many cases we paint our framework the one color that makes it as conspicuous as possible—white, when often it could be left to weather or be stained a dull brown or gray to great advantage.

SCREENED DOORS. The criticism one makes of screening applies to screened doors as well as to porches. They can ruin the appearance of our entrance doors, if we do not study how to reduce the framework, which does not have to be as large as most carpenters like to think. To get style into a screen door may be mainly a matter of proportion. The worst division we can make is to divide the door exactly in half by the cross support. To locate this bar so the lower section is about one-third of the screened area, and the upper

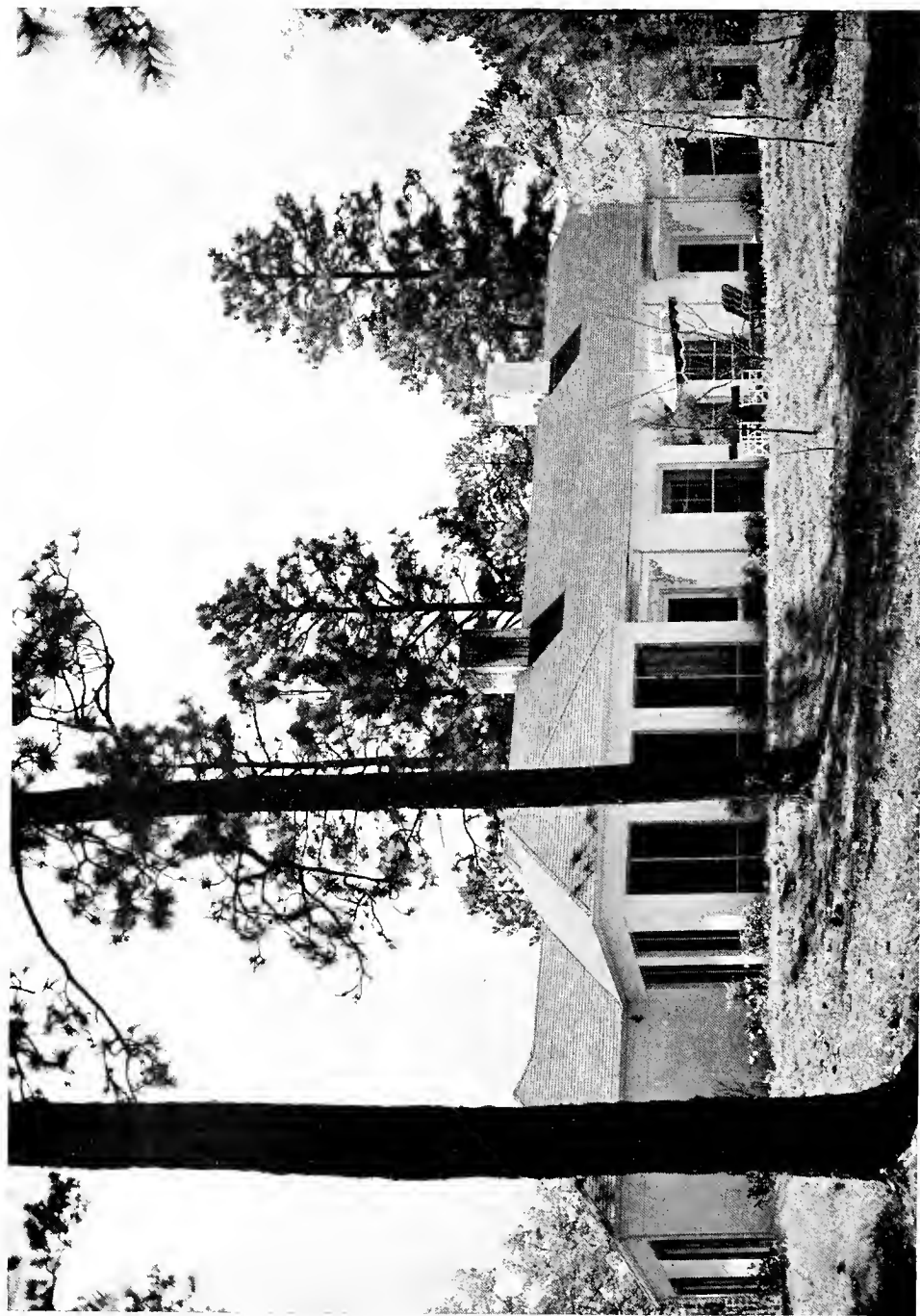


Photo by Silvia Saunders.

42. Screen porch in the home of Philip K. Hamilton in Warm Springs,
Georgia. Architect, Henry J. Toombs.

part above the cross bar two-thirds, is to make a much more pleasing door. If we can use metal for the framework, of a dark color, we can have the framework around the sides much narrower than with wood and the result will be to keep the doorway from looking so tall and narrow.



Photo by Haskell.

43. A Cape Cod house with screened porch in Scituate, Massachusetts, designed by Royal Barry Wills for Mrs. James A. Ward.

A SCREENED PORCH IN A CAPE COD HOUSE. In the Cape Cod house the architect Royal Barry Wills has planned for Mrs. James A. Ward, in Scituate, Massachusetts, where it suits the local building traditions and the modern need of a long rambling dwelling, we find a screened porch designed like the connecting sheds of old Massachusetts houses, between the central two-story house and the one-story studio addition set at an angle. Since it is a connecting link between two wings set at an angle as shown above, the porch is shorter on the side from which the photograph was taken than on the other side. Here the white framework, with cut corners at the top of the screening, follows the outlines of old sheds. The vertical lines made by the screen door seem part of the design because of the proportions they maintain in dividing up the blackness of the screen. The crossbar of the door is on a level with the window sills of the house. The screen itself registers as the dark color of the shutters, and is thus a part of the composition of the whole façade.



Photo by Roy Harper Studio.

44. Residence of Mr. and Mrs. H. B. Macrae in Dallas, Texas.
Architect, Hal Yoakum.

A PROJECTING SCREENED PORCH. On page 54 is shown the home of Mr. and Mrs. H. B. Macrae in Dallas, Texas, designed by the architect Hal Yoakum. Only a portion of the screened porch shows in the picture, but enough to indicate several advantages. It is separate from the street entrance, which means privacy. You can see that the framework around the door and the screening is in a series of shallow arches, and the uprights come at intervals where the arches would curve down to supporting pillars if there were any. Note carefully the door itself, which is not by any means a stock screen door. It has a slightly rounded top, a delicate cross rail dividing the door well below the line of vision, and a simple but decorative design of an X in the lower part, which does away with the need for any vertical bars.



Photo by Samuel H. Gottscho.

45. Screened porch in the home of Mr. and Mrs. J. E. Yonge in Miami Beach. Architects, Schoeppl and Southwell.

HORIZONTAL METAL FRAMEWORK ON A SCREENED PORCH. Where you have no Colonial traditions to consider, you can have your screen installed with metal framework, which is heavy enough to last but delicate enough to take a subordinate place in the opening, and the metal bars can run cross-wise of the screen, leaving through the center an unimpeded view of what lies outside. Such a porch is shown on this page. It is in the home of Mr. and Mrs. J. E. Yonge, designed by the architects Schoeppl and Southwell.



Photo by Julius Shulman.

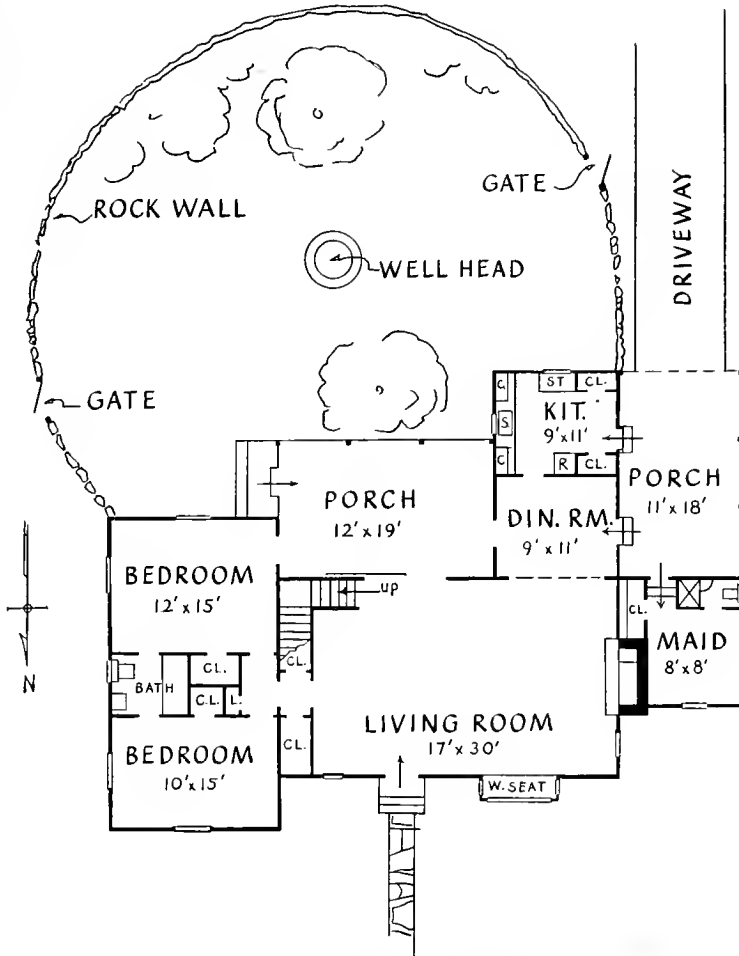
46. The Palm Springs, California, home of Grace Lewis Miller.
Architect, Richard J. Neutra.

The screened opening next the grill built into one corner of the porch has an arched top below ceiling level, and low sill for potted plants. The other open side has screening from the ceiling down to the floor, but the cross bars are lined up with those in the arched opening.

SIMPLE VERTICAL PANELS. The use of simple metal verticals to divide wide openings into smaller units, is pictured just above, in the screened porch of a Palm Springs house designed by Richard J. Neutra, and described in greater detail on page 332. The wide metal base strip, repeating the horizontal line of the cornice, helps counteract the smaller-scaled verticals and connect them into a unified composition. All the outdoor living areas in this house are screened as a protection from insects and the glare on the sands, making it possible for the owner to live here through May.

FROM GLASS DOORS TO SCREENED DOORS. If you will glance back at the Cafritz porch on page 38, designed by Eugene Schoen and Sons, you will note, in the basement garden room, openings for glass doors with metal framework, beautifully refined in detail. If screening were to be substituted

for the glass, the effect would be equally pleasing from the point of view of design, and the metal bars would protect the screening at the points that need support, just as effectively as they do the glass.



47. Plan of country house for Mr. and Mrs. R. A. Malone in South Miami, Florida, designed around a screened porch.
Architect, Howard B. Knight.

A SCREENED PORCH THE CORE OF A HOUSE. I have given emphasis to the design of the screened porch because it is the consideration frequently overlooked. The location of this practical area is also of the utmost importance. In the plan shown above you will see an example of one most conveniently located for circulation from the living room, dining room and bedrooms, and the enjoyment of the rear yard, and for privacy. It is really the core of the house, designed by Howard B. Knight for Mr. and Mrs. R. A. Malone in South Miami, Florida, a rural home set in a grove of mangoes. It is built

of cypress planks, whitewashed outside, with the same interior construction of exposed beams and unpainted wood that you would find in a New England barn. The eight-foot door onto the 12' x 19' porch (see page 57) runs on grooves so that it slides back at a touch and makes the screened porch part of the spacious living room. Here the family dines outdoors most of the time, overlooking the old trees and well-head in the yard.

It was an inspiration to bound the yard by a circular wall, because it makes the house seem to complete the circle. The square timbers for this porch are rough-hewn, and the simple vertical panels of screening are without heavy framework. There is a second porch in this house, off the kitchen and on the way to the maid's room, where the baby plays on rainy days under the eye of the servant in the kitchen. Laundry tubs are set here also. The floor of this porch is on the level of the ground so that cars can be driven under the roof of it in rainy weather. The drive connects with the garage and the road.

GRILLEWORK ON A SLEEPING PORCH. John F. Staub, in designing the screened sleeping porch of the Spanish residence in Houston, Texas, shown on page 59, used a grille of woven wire for privacy across the garden side of the porch, with screening on the inside. The grillework and the supports for the screen are in a brown color, so that they in no way detract from the bold design of the white piers at each end, but at the same time they are in keeping with the Spanish style of the house.

Note the Spanish balustrade and piers in the upper balcony and arches over the loggia below. There is a screened dining porch at right angles to the main wing, which shows as black in the photograph because of the screening. This house has four porches, all overlooking the patio, and all affording privacy—a goodly number, but none too many for a home keyed to modern ways of living in this climate.

MODERN IMPROVEMENTS IN SUN PORCHES. Some years ago there was a fad for sun porches. It was a forerunner of the present-day trend to bring the outdoors in. At that time wide window openings and doorways were not practical for interiors in cold climates. So from many kinds of homes box-like additions were built out, enclosed in glass and often furnished in wicker. These sun porches, as they were called, were often ugly in design because the sash was so different from any of the other window sashes in the house, and because the projection itself was irrelevant to the design of the house. Sometimes they were located outside the front entrance, a poor situation for privacy. But they sold us the idea of getting fresh air and sunshine all year round into an informal recreation room. Like the first models of the automobile, they have been superseded by something more efficient and better designed for this new era.



Photo by Silvia Saunders.

48. Four porches in the William J. Crabb home in Houston, Texas. Architect, John F. Staub.

Modern sun-rooms are better integrated into the design of the house, and better located for privacy than the conventional sun porch or sun-room of a dozen years ago. They do not look like after-thoughts. The design of the windows and doors ties in with the architecture of the house. The sun-room in the Long Island house shown on pages 71 and 72 illustrates this point. The convertible porch at the rear of Cameron Clark's Connecticut home, described earlier in this chapter (see pages 47 and 48), is really a well designed sun-porch with the extra advantage of becoming entirely open to the out-of-doors in summer when the glass sash is removed.

A HAWAIIAN ROOM WITH A SLIDING WALL. The Lanai, or Hawaiian room, designed by H. Roy Kelley for a home in Bel Air, California, has a different feature which converts an interior into an open porch. One whole wall of steel and glass doors slides out of sight into pockets at either end of the room when so desired, making the room an open-air living porch contiguous with the garden terrace outside. (See page 60.) Such long, unbroken openings you would not find common to sun-rooms of a decade or so ago. They had many smaller openings for air, but you were conscious of the frame-

work between or of the solid low wall continuous below casement windows around the room, except at the entrances, which kept the room separated from outdoor areas. The new idea is to concentrate our enclosing walls and our openings in unbroken stretches of one or the other. The result is a much less confusing cutting up of wall spaces.

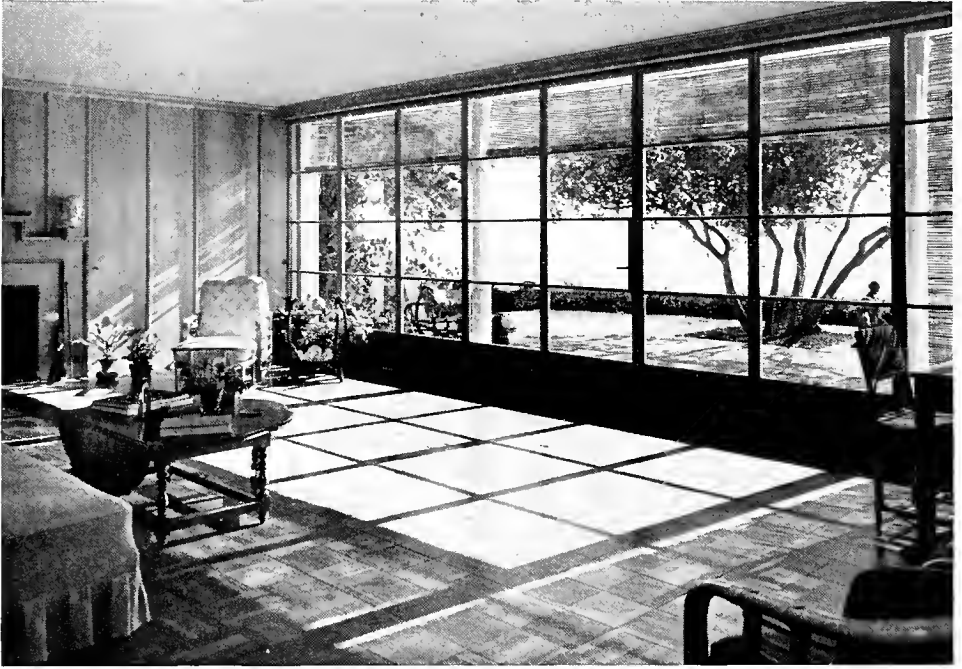


Photo by George D. Haight.

49. Interior of the Hawaiian room in the new home of George Chappellet in Bel Air, California, Architect, H. Roy Kelley.

This Lanai is at the rear of the house, connecting with the living room, the entrance hall and the dining room, and is under the roof of the main house. It does not project out from it. It is thus integrated in the plan of the whole house. It is treated in a somewhat Hawaiian manner with a long and deep couch, called a Hickiai, on the side of the room facing the glass doors. It has harmonizing furnishings of bamboo, reed and block-printed fabrics, but the imported notes are well blended with typical American furnishings, such as the bridge table at the right of the picture. The vertical wood panels forming three sides of the room are of luan, a Philippine wood. The floor consists of oak blocks which were impregnated with oil and processed to make them waterproof.

I was impressed in the Hawaiian room by its spaciousness, which is typical of the modern sun-room, and important if one wants to suggest the



Photo by Stoller.

50. Inside the living room looking out at the Alfred C. Koch home, Cambridge, Massachusetts. Associated architects, Edward D. Stone and Carl Koch.

free, open spaces of the out-of-doors. It is not a matter of having the room itself very large, but of keeping the space in it uncluttered. The outmoded kind of sun-room was often so crowded with furniture and plants, that the occupants could not have the restful feeling of being out-of-doors, although they had fresh air and sunshine.

The doors in this California Lanai are of an accordian type, fairly weather-tight. They are weatherstripped at top and bottom to keep out water, but it is rather difficult to keep them draft-proof. They would be feasible in colder climates if storm sashes were put on outside this glass wall in winter to insulate it against cold and wind. The heating system in a house could be planned so that heating panels or registers for warm air in the floor in front of the long window would offset the heat loss in winter. Here the fireplace helps heat the room in chilly seasons.

ANY ROOM CAN BE A SUN-ROOM. One reason why fewer separate sun-rooms are being built these days is because any room in the modern house can have the same unbroken stretches of windows or doors we associate with the sun-room or sun porch and still be comfortable to live in. The Massachusetts interior designed by Carl Koch and Edward D. Stone, shown on page 61, illustrates this fact. The explanation of why this is possible in the New England climate at no great expense is given on page 135.

The house designed by Richard J. Neutra, shown just below, has what he calls a lounging porch for living and dining at one end of the house,



Photo by Luckhaus Studio.

51. Interior of the sunny living and dining rooms at the residence of Mr. and Mrs. Albert Ruben in Los Angeles, California. Architect, Richard J. Neutra.

completely enclosed on three sides by large glass panels and window openings through which the famous California sunshine streams without stint, since the house is on the edge of Uplifters Canyon near Los Angeles, and overlooks a broad valley below. Curtains can be drawn if the sun is too blinding, and at night.

In the home of the architect, Kenneth Day, in Mignon, Pennsylvania, is a bathroom with a bay of glass in which plants thrive set on shelves inside the window. The steam from the hot baths and the sunshine are both conducive to plant growth. This bath-dressing-room is a very cheerful place, with a sundeck outside it for sunbathing.

There is heat loss in winter through large expanses of glass, although it is less when sashes are fixed than when made to open, because the greatest heat loss is due to the infiltration of cold air through an un-weatherstripped window or door. One wonders at the stoicism of the people in past ages who suffered from the cold that came from large Palladian windows, triple windows, French floor-length windows, French doors, and bay windows, to name a few of the forerunners of the glass walls of today. Even twenty years ago, if an Ohio living room had a series of casement windows, the heating and insulating facilities for homes available at that time would not have been able to offset the heat loss through these windows in winter, except at great expense. Today there are ways of compensating for such heat loss. One is by storm sashes. One is by weatherstripping the windows and insulating the enclosed walls of a house and the roof, so that there is no heat loss anywhere else. Another is by having an efficient up-to-date heating system.

THE HOUSE WITH DOUBLE WALLS. In the house designed by William Lescaze for Alfred L. Loomis at Tuxedo Park, New York, shown on page 64, there are double walls all around the house, separated by two feet of air space. The outer wall, like the inner wall, is mostly of glass with some solid brickwork between. (See the plan on page 65.) The inner shell is insulated with mineral wool in both ceiling and walls, but the dead air space between the inner and outer shells is the unusual and special means of insulating this house. This space and the air space over the ceilings is heated by a separate heating unit of its own. The house itself has its independent air conditioning system which regulates the temperature and the humidity inside it. The double wall is a revolutionary way of solving the problems of insulation and fuel economy connected with the use of glass walls, which are at present engaging the skill of modern architects and engineers. It offers certain other advantages in this house.

You can walk through the narrow passage between the inner and outer walls to get from the garage to the front hall (see the plan), or around the



Photo by Ralph Steiner.

52. Conservatory and hall in the Alfred L. Loomis residence at Tuxedo Park, New York, designed by the architect, William Lescaze.

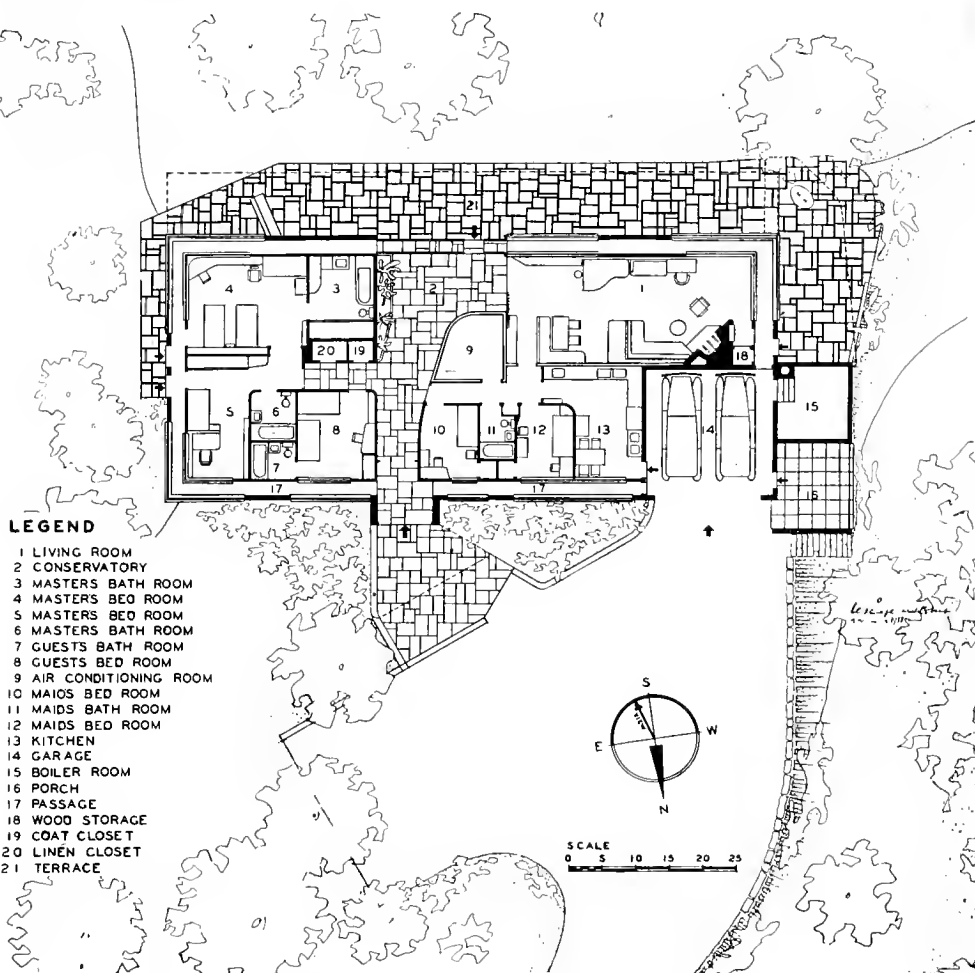
west side of the house to the living room from the garage or west terrace. It thus provides convenient circulation. The air space also deadens noise from outside.

One of the reasons for installing an air conditioning system is to enable us to have the amount of humidity in the air indoors which we find pleasant and healthful, but the humidity is bound to cause a condensation of moisture on large glass panels, unless they are insulated in some way. Because of the double walls here, such moisture which obscures vision and mars paint does not collect.

The central hall, walled with travertine and paved like the terraces it connects with, runs through the house and widens out into a conservatory-porch on the south side of the house, where sliding glass doors in both walls allow direct access to the out-of-doors. As the photograph shows, there is thus no separation when summer comes between the sunny porch room and the terrace open to the sky. Lounging chairs make both areas livable. The plants and vines growing in a raised bed at one side of this conservatory-porch are easier than many potted plants to care for, since

drainage is provided for the bed, and water spilled on the paving does no harm. Halls or porches thus treated have an outdoor quality.

It is interesting to note how the plan for this house, which is all on one floor at ground level, combines under one roof garage, guest rooms, servants' quarters and servants' porch, and all the other necessary areas for family living—including the boiler room and air-conditioning room. The living-dining room is over thirty-seven feet long. All four bathrooms have skylights but no windows, a most desirable arrangement for a one-story house. The air conditioning system makes ventilation by means of windows unnecessary. Over the front terrace the main roof extends like a canopy, supported by steel I-beams to afford overhead protection as one comes to the door.



53. Plan of the Alfred L. Loomis house at Tuxedo Park, New York.
Architect, William Lescaze.

CONSIDER THE ENTRANCES

SUPPOSE WE HAVE fixed in our minds that we want a certain number of rooms inside our house, and a certain amount of living space out-of-doors, located in a useful relation to the inside rooms and the views; the problem still remains of how and where to plan the public entrance into the house, and the service entrance. It used to be such a cut and dried matter. The front door toward the street and the living rooms was the public entrance, and the back door into the kitchen was the service entrance, and that was that. Very often a driveway for carriages looped around the house and ended in a stable at the rear.

THE CHANGE FROM HORSE AND CARRIAGE DAYS. Two changes in our way of life have profoundly affected the solution of the problem. The change from the horse and carriage to the automobile as a means of transportation was the first change. It meant that instead of a stable, located away from the house to avoid distasteful odors and flies, we plan a garage which can be joined to or even incorporated in the house. But at first the garage and parking space were located in about the same relation to the house as the former stable was, without much thought of the inconvenience attending such a location, both to the owner who had to walk back after storing the car, and to the guests.

No one foresaw that the guests who used to walk to the front door from neighboring homes when they came to call would all have cars and use them for short distance transportation. No one foresaw that traffic would increase in the streets, in many communities, to a point where if you are entertaining many friends it is difficult for them to park in the street. If the grounds are laid out on the old traditional plan, callers have to park out near what used to be the stable, and if the weather is stormy the human desire to seek the nearest shelter brings them inevitably to the service door.

If you stop to think of the many old houses that are being remodeled for present day use, you will find that in eight out of ten of them the old-time front door facing the street is the one least used. People drive into the yard and arrive at some other door than the one the original builders intended as the dignified approach to the house. Something should be done about this if you are remodeling an old house, although it may be a country house where life is less formal than in the towns. Even so, it is poor planning to have the kitchen door the one most convenient for guests, and the beautiful main door extremely impractical to use. Something has been done

in making the plan of new homes a great improvement over some traditional ones when it comes to the location of the entrance to the drive, garage and service door.

OUTDOOR LIVING DEMANDS PRIVACY. I spoke of another factor beside the ubiquitous automobile that has led to a change in the traditional location of the service and main entrances to a house. This is the trend to living out-of-doors. Now if you are going to be dining or entertaining guests, you do not want to be exposed to the public gaze. The spaces for out-of-door rooms demand as much privacy as indoor rooms. They cannot be used as passageways for the grocery boy, the postman and the salesman. In other words, we cannot have our patios, porches and terraces invaded by whoever is seeking entrance at either a main or service door. Very often these exterior rooms are located at the rear of the house, as are the interior living rooms. This means that both the service door and the main entrance must be elsewhere.

ACHIEVING GARAGE AND ENTRANCE FACILITIES IN OLD-STYLE HOUSES. Certain traditional houses and outbuildings lend themselves to our modern ideas of convenient entrances without much trouble. The Norman French house shown on page 69 and the Monterey house pictured on page 266 have forecourts true to traditions, with garages where the traditional stables might have been, in a wing not far from the front door. You can get inside both these typical traditional houses under cover and without passing through the kitchen.

But you may find some old homestead in New England that you want to buy, which needs adapting to gain such access from the modern motor car to the front door. Perhaps the house needs to be moved back and turned at right angles from its original position facing the road. This may give you the use of the beautiful entrance door you admire in the right relation to a garage and forecourt near it. Perhaps the old barn or stable is back where you intend to have a tennis court or swimming pool, and would be ideal as a recreation building for the young people, and by building a small new garage like an old woodshed next a side door leading into the dining room or study wing, you can greatly lessen the distance to be traversed from the incoming car to the house.

In some cases an old barn may be left where it is and be used as a garage, but the interior layout of the old homestead can be redesigned so that the nearest door for guests to approach after parking their cars is no longer a kitchen entry but the entry into a living room.

Old driveways can be widened for adequate parking space, and car shelters for visiting friends built near the corner of a house in the side yard,

with a walk or arbor constructed from such a parking space to the front door, while the family can use the old barn much farther in from the road as their closed garage.

MODERN MOTOR CAR APPROACHES. The house built today for contemporary needs solves the problem of the motor car approach in several ways. It may provide a large forecourt in which transient cars can park or turn around and exit through the same drive they entered. The owner can drive his car into a garage adjacent to such a forecourt. It takes a space at least sixty feet across for the average car to turn around and exit without backing. This might well be more to allow for free circulation of traffic and for parked cars. The motor court that is well drained and fully paved with gravel, bluestone, granite pavers, brick or concrete, is superior to one that is wholly or partly of earth and subject to spring thaws, washouts, or standing water which may freeze. Drives also should have a durable surface and good drainage.

Another method of approaching a modern house is by way of a drive that loops in a curve from the road to the front door and then out through a different exit. This requires twice as much driveway, but may suit a shallow space better than a motor court and can be supplemented by adequate parking space near the garage. Or the drive can be made double width.

The least desirable but often the only practical plan for a limited piece of property is a driveway straight in from the road a short distance to a garage. The only way to exit is to back out into the street. See the plan by Joseph Shilowitz on page 44. By widening such a drive, an extra car can park in it. A good example of a driveway large enough to serve as a turnaround and with space next it for parking shows in the plan of a Tuxedo Park home on page 65.

THE MOTOR COURT. The first arrangement of the motor court is the one shown in the photograph of the house Mr. Coleman Moser designed in North Stamford, Connecticut. (See page 69.) From the gate in the wall that runs along the street, cars come into a pebbled court, adequate to turn around in, and drive out through the same gate. The front door of the Norman French stucco house, flanked by raised beds gay with flowers and evergreens, offsets the severity of such a court. So does the central fountain. The service entrance into the house is through a white gate at the left of the picture. The garage wing at right angles to the house has a covered passageway connecting it with the library, so the owner can have access to the garage without getting wet in rainy weather. (See the plan on page 70.)

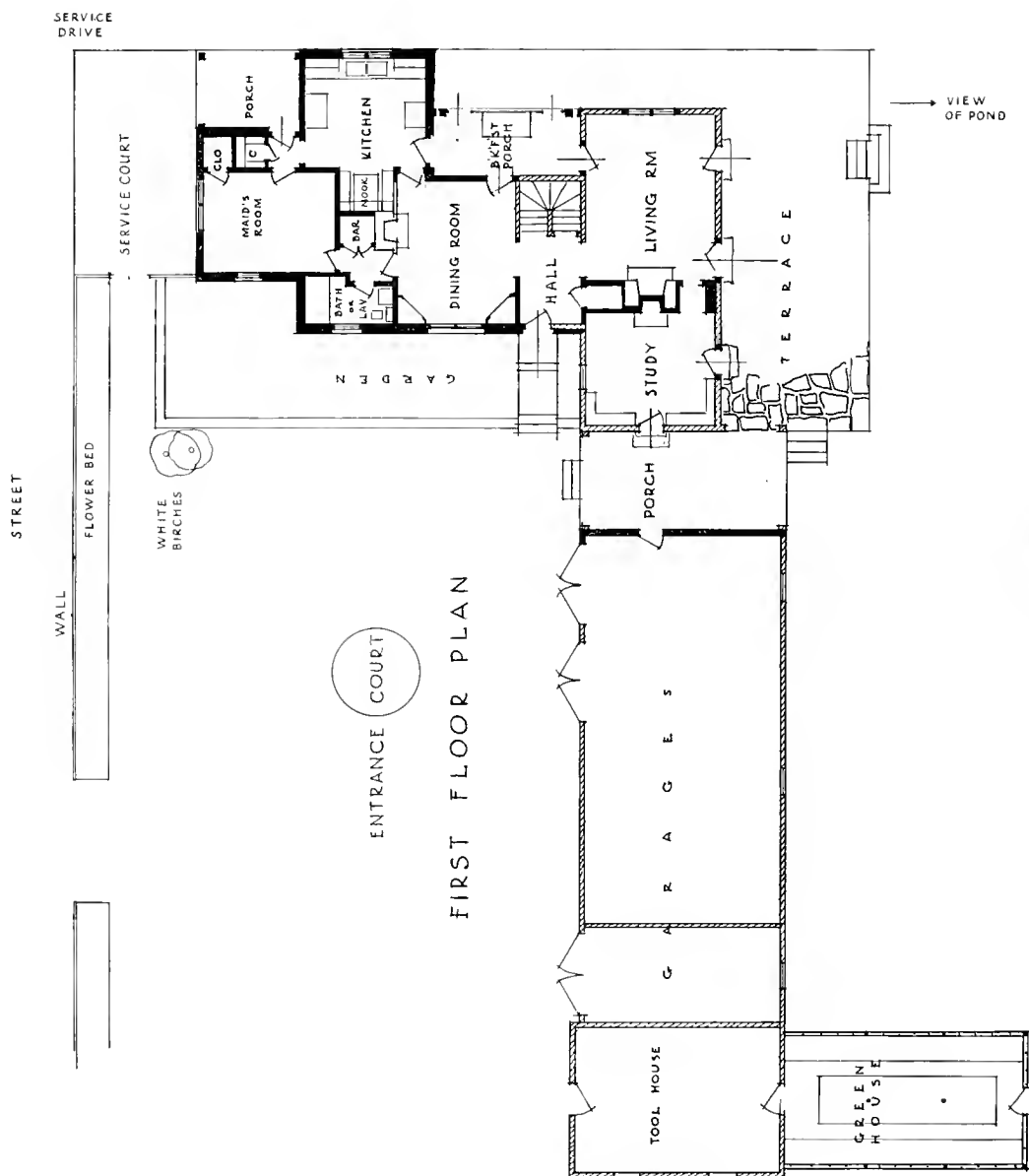


Photo by Mattie E. Hewitt.

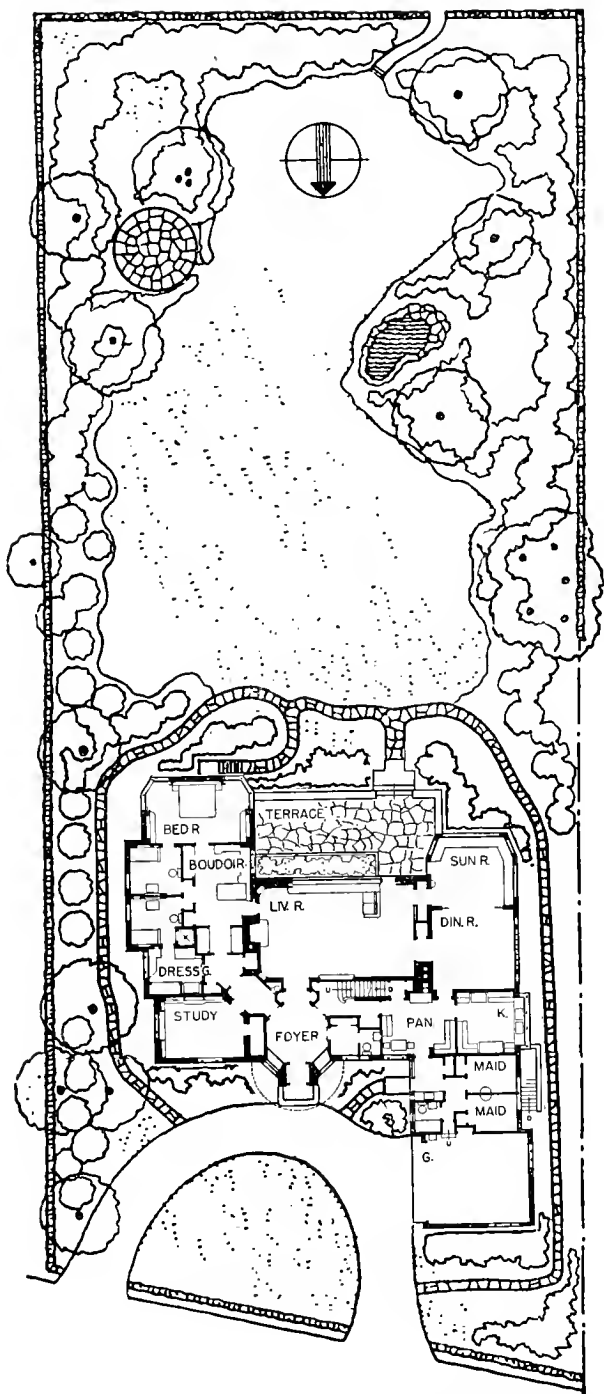
54. Entrance court in a North Stamford, Connecticut house, designed by the architect, Coleman Moser, for his own use.

THE CURVING DRIVE. The second kind of entrance plan, with one place for entrance and another for exit, shows clearly in the house of reinforced concrete designed by Hans N. Worman for a home in Great Neck, Long Island. (See plan, page 71.) He makes use of the 100 foot frontage of the lot for a curving drive which connects the front door, the service door and the garage, all in close proximity to each other, and then loops out to the street again. Thus there is no occasion for the privacy of the rear of the house to be broken into. The garage is in the end of a wing nearest the street. Across the front of the main house are the dignified portico and foyer, study, clothes closet, lavatory, pantry and kitchen, which leaves the exposure most suited to the living room, dining room, sun-room and bedrooms at the rear. A spacious terrace, reached through the living room or sun-room, commands a view of the lawn and rock garden below.

A SECLUDED REAR TERRACE. The photograph on page 72 shows this terrace, pleasantly related to the ground by the retaining wall of native field-stone. The plan shows how the low shrubbery at the side of the lawn curves out to vary the rectangular line of the lot, with the pool as a great source of interest. The second source of interest in the yard is the circular stone tea terrace in the shade of large trees, from which a different view



55. Plan of the Coleman Moser home in North Stamford, Connecticut, designed by him.



56. Plan of a residence in Great Neck, Long Island.
Architect, Hans Worman.

of the pool and rock garden is possible. The whole layout of house and grounds is livable through the careful grouping of service space, living quarters and sleeping rooms, each in separate wings, and the making of each one of these groups as efficient as possible. Note the corner windows in all the bedrooms, contributing much to the modern spirit of the house which affords many vistas through wide groups of windows.



Photo by John Gass.

57. Rear terrace in a house in Great Neck, Long Island.
Architect, Hans Worman.

DRIVING INTO THE HOUSE. In the age of chivalry, a knight on horseback could ride through wide castle doors into the great stone-paved halls, alight and have a page boy lead the horse away. Today some of us wish we could drive our cars right into the front hall of a house, alight and have the car disappear through some trapdoor! This wish was almost achieved in the Motor Home designed by Adams and Prentice for the Town of Tomorrow at the 1939 New York World's Fair. You drove into either of two wide doorways at the front of the house, into a 19' x 22' tiled motor room. Between the two glass swing-up garage doors was a beautifully paneled wooden door for people arriving on foot to use. (See sketch on page 73.)

The cars stayed in this glorified garage and you then went into the front hall behind it. To the right and left of the hall were the dining and living rooms toward the rear of the house overlooking the garden, while at the front of the house the kitchen was located at the left of the motor room, with a study at the right.



58. Sketch of Motor Home, designed by Adams and Prentice, for the New York World's Fair.

The one objection to this particular scheme was that no direct light came into the front hall on the main floor, although glass bricks at each side of the hall door let in a dim light. Moreover the motor room floor had to be constantly cleaned and kept free of debris to make it possible to walk from it onto the hall rugs without tracking in grease and gasoline. At the same time, the design was a step in the right direction. The architects made the garage as attractive as a portico across the front of the house. Note in the drawing the decorative wrought iron and Regency style roof. They also intended it as a recreation room. It allowed the house to be set as close to the street as the building code would permit, cut down on the space necessary for a driveway, and so saved more space for a garden at the rear of the house.

GARAGES INSIDE MODERN HOMES. If we look into what leading architects are designing in the homes of today, we find just as interesting solutions for the garage without going to this extreme of a motor room as a portico. The garage spaces at each side of the main door and hall of Sumner Spaulding's California residence are described on page 131. Mr. J. R. Davidson, in the stone-gray stucco residence he designed for Herbert Stothart in Santa Monica (see plan, page 210), has located the garage to the right of the front doorstep under the house roof, and opened it at the back into the front hall. (See page 74.) The kitchen and servants' dining room are at the front of the house to the left of the hall. Over the second floor balcony, with its attractive window boxes along the balustrade, extends



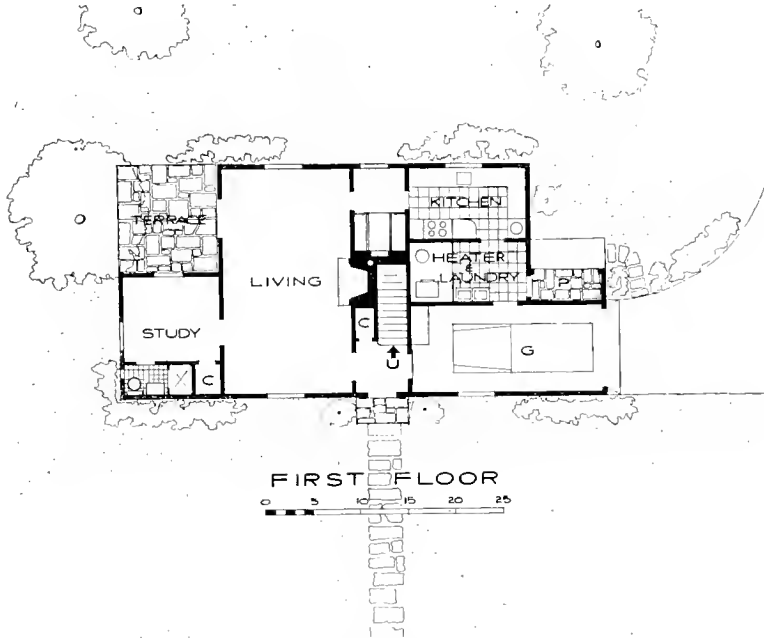
59. Entrance front of house in Santa Monica, California, designed by J. R. Davidson for Herbert Stothart.

a continuous trellis and overhang, both functional and decorative. A service yard, complete even to a tiny kitchen garden, is screened from the motor court by a high stucco wall. Back of the garage is an outdoor living room, described on page 296. Like all the terraces and indoor living rooms, it is located at the rear of the house to get the superb views. The interesting point to notice here and in the modern homes shown on pages 40 and 65 is the tying in of the garage to the lines of the house.

A GARAGE NEXT THE FRONT HALL IN A FRAME HOUSE. The small Colonial house with a central chimney recently built in Port Chester, New York, has a most ingenious way of incorporating the garage in the space to the right of the front door with a second-story bedroom above it. You can see in the plan on page 75 how it is approached by the drive at the side of the house, illustrating the modern ideas of driving right into the first floor, even in a traditional Colonial home. The photograph on page 255 shows how the garage is lighted by a window toward the road, just like the window in the living room on the other side of the hall. You will note on the plan that there are two doors from the garage into the house. One is into the heater room and laundry and so on into the kitchen, the other is into the front hall. The garage shown on page 40 has similar advantages.

As many small families do their marketing mainly by car, it is efficient not to have to carry bundles all the way around the outside of a house,

or through it, to reach the kitchen. The ideal garage and drive affords easy access both to the service quarters of a house and to the main hall, but if one has to choose between one or the other, it is wisdom, considering the many occasions when one has guests and the weather is stormy, to avoid having the only ready entrance through the kitchen.



60. Plan of the house designed by the architects, Scott and Tegen for Fritz Kunz in Port Chester, N. Y.

THE SIDE ENTRANCE HAS ADVANTAGES The main entrance and motor court are at the side of the French Colonial house designed by Daniel Hopping and myself, for a lot 80' x 120', shown on page 76. The court is only 24' x 36', which necessitates backing into a parking position against the lot line opposite the garage door, and backing out of the garage toward the orchard wall when driving out; but by keeping this gravel court small, one has much more space for other needs. It means that behind the garage there is room for a drying yard, screened from the street by a tall dense hedge and from the garden by a high stucco wall. By having the door of the garage at the side of the house, one avoids the ugly appearance of an open garage seen from the street. It has a door into the front hall, with a small lavatory tucked into a corner of the hall where it is most useful. The plan is given on page 159.

The flat roof of a one-story garage such as this makes a sun-deck for the bedrooms over the rest of the house. It was our purpose in the plan of this

house to have room for recreational facilities at the rear of the lot, and space for a secluded flower garden off the large living room. (See details, page 250.) The service door is on the same side of the house as the front door beyond the motor court. So that the porch might not darken the living room, it was located off the little rear hall beyond the living room, accessible also to the downstairs extra room, which might be for guests, maid or children. But the living room has a door directly into the garden, carrying out the idea of a garden entrance independent of the main entrance or service entrance of a house.



61. Sketch of the French Colonial house designed by Daniel M. Hopping, architect, and Margaret O. Goldsmith, interior decorator.

A CHEERFUL PASSAGEWAY TO THE HALL. Where a garage and motor court are at a little distance from the front door or on a different level, it is important to have a passageway to the house that is not as gloomy as a tunnel in a coal mine. Putting color into the cement floor of the inside passageway and painting the walls a soft color is one way. Groups of prints can be hung to make a stairway interesting, or murals can be painted on the wall. In Rex Stout's home in Brewster, New York, the garage wing is on a level a little higher than the house, and beside an outdoor path to the main door there is a covered passageway from the garage sloping down to the front hall, intended as a conservatory for plants during the winter

when the outside walk is seldom used. For this reason, stock size casement windows are set into the sides of the passage, resting on a broad concrete foundation on which the pots of plants are set. The cement floor is a rich henna color. Water that is spilled when the flowers are watered drains into a catchbasin in the floor. Steam pipes from the house keep the passageway warm. Outside grapevines make patterns against the light blue walls, while shrubs and annuals grow higher than the window sills.

ENTRANCE ON A LOWER LEVEL. The architect Kenneth Day, in designing a house for Mr. and Mrs. Marshall Cole at New Hope, Pennsylvania, on the site of an abandoned lime quarry, took advantage of previous excavations to locate the entrance court on a level lower than the house, and

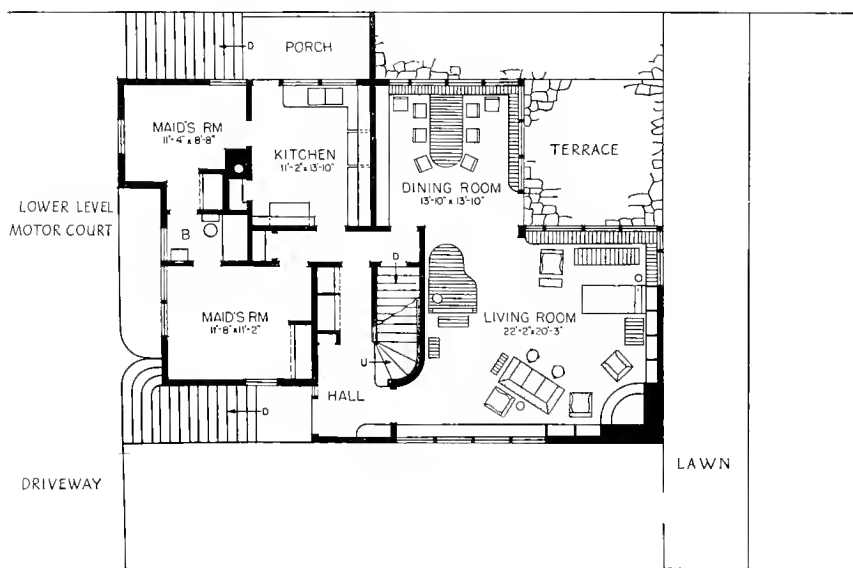


Photo by C. V. D. Hubbard

62. The home of Marshall Cole at New Hope, Pennsylvania.
Architect, Kenneth Day.

put the garage, together with the laundry, boiler room and toolroom, under the first floor. He took advantage of the richly colored stone from the old quarry for this basement entrance, as well as for walls and the chimney corner, and scored another master stroke in his choice of unplanned swamp cypress planks, used vertically, for the rest of the house, which is turning a silver tone with the weather, and in every way blends into the woodland setting. The photograph on this page gives you the general idea. A person arriving in the motor court outside the garage door, with its protecting

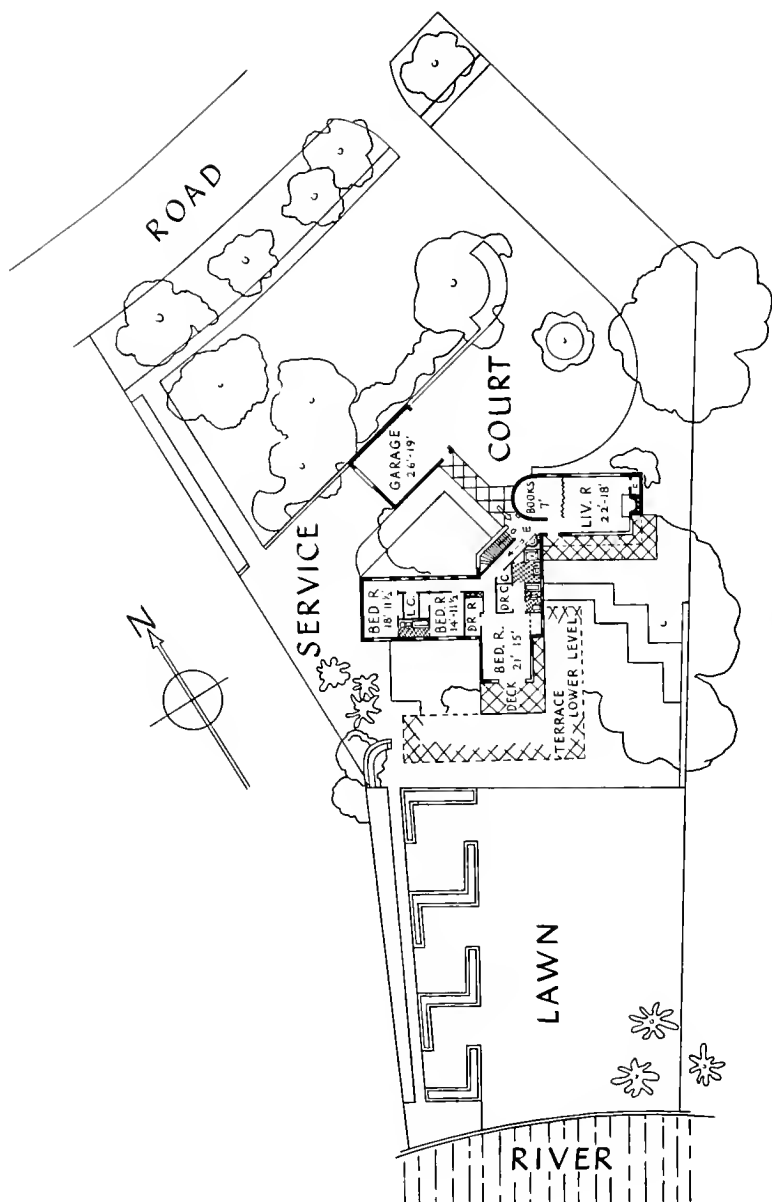
overhang, sees an important flight of stone steps up to the main door, made interesting and at the same time practical in rainy weather by the projecting sun-deck off the second floor bedrooms. There is also an attractive inside stairway from the basement corridor off the garage to the main hall above. In other words, whether you alight from a car in the entrance court or drive right into the garage, you can gain access to the hall of the main house without going into a living room or kitchen.



63. Plan of the Marshall Cole house in New Hope, Pennsylvania, by Kenneth Day.

There is a second outside stairway for service use from the entrance court around the corner. It leads to the porch off the kitchen. (See the plan on this page.) On the upper level around the living-dining-room, with its many windows, there is a walled garden. It has its own entrance to the house by way of the dining room and its own exit to the ferny wooded slope outside it. In this matter of planning for privacy, convenience, compact arrangement, adequate storage and living space, the house has many features usually associated with a much larger place.

A LIVABLE PLAN FOR A SLOPING LOT. Even though a house is built on a sloping lot, it is not always feasible to have the garage under a house. The street façade may be on the higher level and the best place for the outdoor living rooms may be on the lower level toward a view, such as is afforded in the house built by the architect Wellington Cummer for his own home, on the St. Johns River in Jacksonville, Florida. As the plan on page 79 indi-



64. Plan of the house designed by the architect, Wellington Cumber, in Jacksonville, Florida.

cates, his is an odd-shaped piece of property, sloping down and tapering off toward the river. The drop in grade is over ten feet. Fine old live oaks dot the property, and show in the picture of the terraced gardens below the living room. (See page 81.) A hickory grows in the space between the garage and the service wing. "These trees," as Mr. Cummer explains, "the drop in grade, together with the shape of the lot and the curving restriction lines, largely dictated the design of the house." (See page 79.) "A further consideration of orientation was the afternoon glare from the river. This problem was solved by eliminating all windows to the northwest, but at the same time maintaining cross ventilation in each room."

The garage was located as near the road as restrictions permitted, and the forecourt, with turn-around, planned so that people walk from cars on a tiled passageway treated as an arbor between the garage and the entrance hall. The living room, with a curved book alcove, extends as a wing on the upper level, commanding a view down over the terraced gardens toward the lawn and river, while the dining room, furnace room, dark room, kitchen and maid's room are on the lower level below the bedrooms. The photograph on page 81 shows the extensive living terrace outside the dining room and the interesting material, never before used for the construction of a house. It is Cumrock blocks, a mixture of Florida cement and Ocala lime rock cast in a standard three core unit. Ordinary red brick is used for trim. The retaining walls in the terrace are of Cumrock blocks, and the terrace is paved with red brick in a basket-weave pattern, into which a fret design is introduced by 8" x 8" Cumrock blocks. Whenever the construction work outside a house repeats, as here, perhaps with different emphasis, materials used in the house itself, there is a harmonious relationship established between house and grounds, in keeping with the whole philosophy of modern homes.

Shade as well as protection from sudden rainstorms is the reason for the canvas projections around the part of the terrace under the balcony. They are hinged at the top and can be easily lowered to enclose the space. For shade as well as protection from sudden rains, the fenestration in all but the casement windows consists of a special sash that can be left open at all times. The bottom of each sash projects out like a louvre. This type of window is much better than double hung or casement windows to keep out rain when open for ventilation. Over all the casement windows are special transoms, also pushed out from below and adequate to keep out light rains. Because of the excessive humidity in this locality in summer, air-conditioning is not thought practical. But a four-foot attic space is provided over all the rooms and is insulated with glass wool and provided with a six-foot electric fan.

To come back to the subject of entrances, Mr. Cummer's house has not

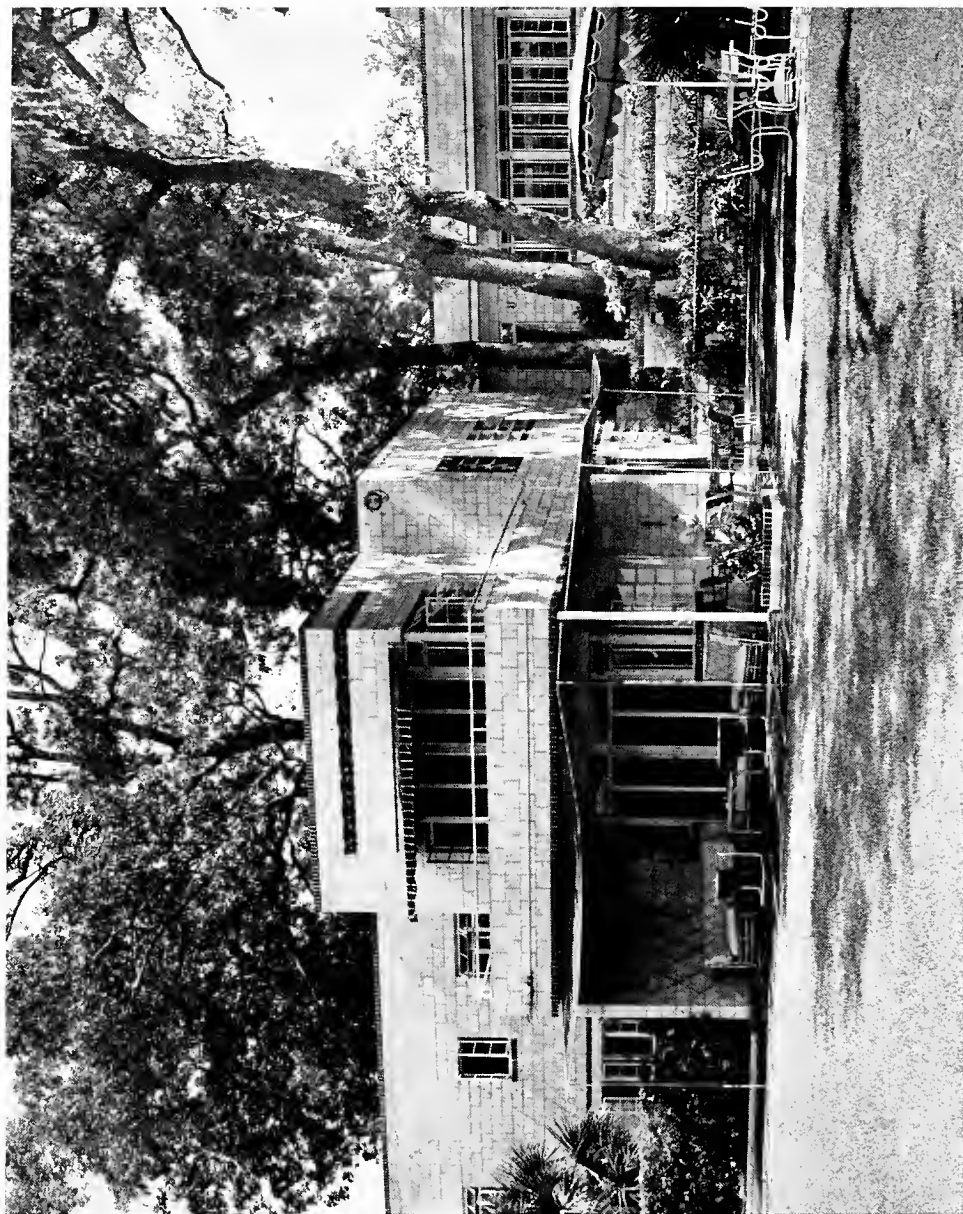


Photo by Dishinger.

65. The terrace façade of Wellington Cumber's home in Jacksonville, Florida, designed by him.

only the main public entrance from the motor court to the front door; it has also a path from the sidewalk along the street down into the service court around the service wing, so that groceries can be delivered at the kitchen door which, with the terrace immediately around it, is screened from the lawn on the lower level by a hedge of native swamp myrtle.

A COMPACT ENTRANCE PLAN. Nothing could be more straightforward and direct than the way entrance court, garage, service and main entrances are combined, all in the small space shown in the photograph on page 83 of the little house designed by the architect Frank W. Green. It is but a step from the garage to either of the entrances and not at all hard to guess which is the service door and which the main door! As there are long views down a peaceful canyon to be glimpsed toward the road, and a secluded hillside bathed in sunshine toward the back, the dining and living rooms have exposures in both directions, and a patio to go out into at the rear, away from passing traffic. The plan of the house (see page 83) is a modified L, with bedroom wing and living rooms surrounding the patio on two sides. A projection of the roof out from the dining room shades part of the patio. Shelves for plants next the door make it roomlike. The picture of it is on page 84.

Both in plan and appearance this week-end house of undeniable charm would be as suited to a New England hillside as it is to a California canyon. The construction might have to be adapted to a more severe climate and a small heating unit could be installed in the basement under the front part of the house.

Two materials are combined here in the exterior construction. The superstructure is of rough redwood painted white, set back around the front inside a foundation wall of whitewashed bricks, as high as the window sills. This brick foundation is thick enough to serve as a wide ledge for pots and window boxes, which accentuates the horizontal lines of the house. It seems like an arm thrown around the frame part of the building to keep it from blowing away or sliding down the hill. The gently sloping shingled roof helps maintain this close-to-the-ground look which I think is the reason the house has so much appeal. A maid's room and bath are a few steps up from the kitchen level in the tower. It deserves comment as another distinctive feature in this efficiently planned house.

THE CAR-PORT AND CAR SHELTER. In the house Frank Lloyd Wright designed for Dr. and Mrs. Paul Hanna in Stanford University, California (discussed on page 172), he planned what he calls a *car-port*, a covered space for cars to drive through extending from the garage to the main entrance. I see this type of porte-cochère, large enough for cars, being used in many modern houses, where space at the end of the drive permits and

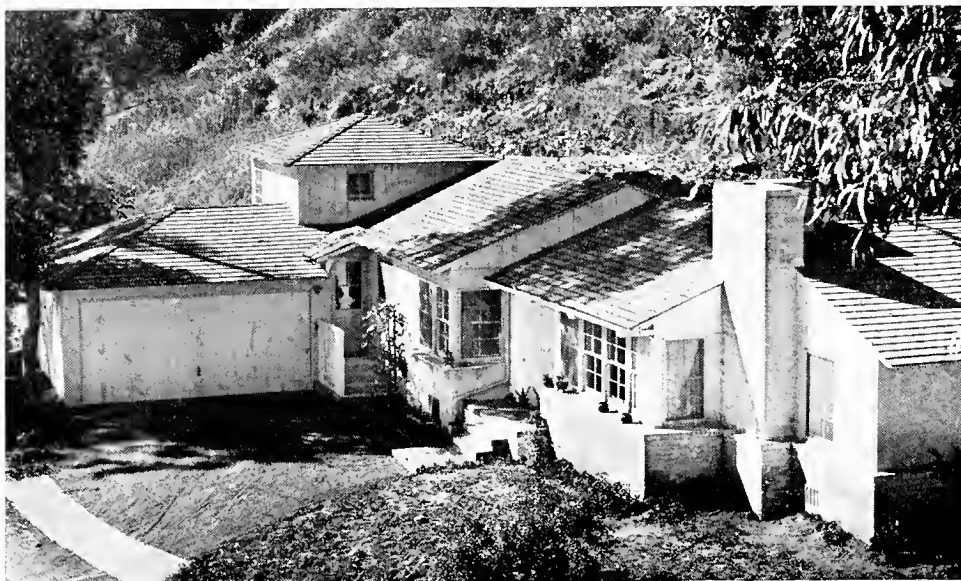
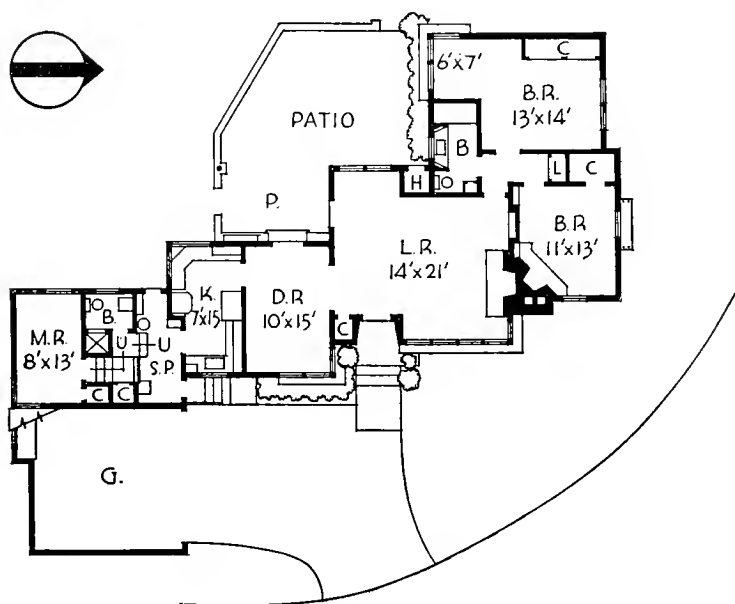


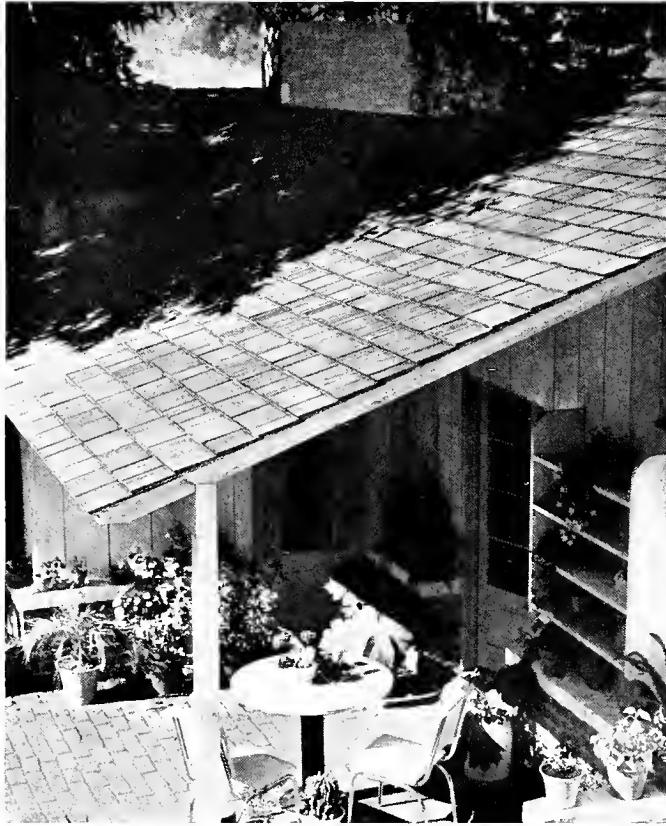
Photo courtesy of House Beautiful

66. House near Los Angeles, California, designed by the architect, Frank W. Green, for Mr. and Mrs. Frank H. French.



67. Plan of the Frank H. French house near Los Angeles, California, designed by the architect, Frank W. Green.

where it can be so arranged as not to darken main halls or living rooms. It is not always at the end of a drive. It may be a covered area at some point in a drive that loops in from the main highway and out.



68. The patio in the Frank H. French house near Los Angeles, California. Architect, Frank W. Green.

THE "DRIVE-THROUGH" GARAGE. This "drive-through" car shelter is employed successfully by Harwell Hamilton Harris in the bachelor's paradise he designed for the playwright, John Entenza, in Santa Monica, California, where on account of the climate an enclosed garage is unnecessary. (See the photograph on page 85, and the plan on page 86.) Because the ground drops off into a ravine below the bluff the house stands on, there was no possible way to set the house back farther from the busy street than it is. A garage close to the street would mean that a car would have to back out of it and be in danger of traffic. So Mr. Harris evolved a curving drive in and out of the shallow front yard, with a covered space at the entrance door of the drive which serves as both garage and porte-cochère, the projecting slab of the roof with its corrugated iron cornice affording cover from

the car to the house. When a modern designer is faced, as Mr. Harris was in this case, by a highly individual problem, he seeks to solve it in a logical, unhampered way that is right for the given job, and let the resulting appearance grow out of the organic need. Here the result, seen illuminated at night by a sand-blasted side-light from the hall, is astonishingly dramatic and as beautiful as a streamlined car. I have often observed that when we are pushed into a tight corner and forget all the hackneyed ways out, we gain our freedom and emerge master of the situation by new, creative means that make people think we set out to be different. Necessity is still the mother of invention.

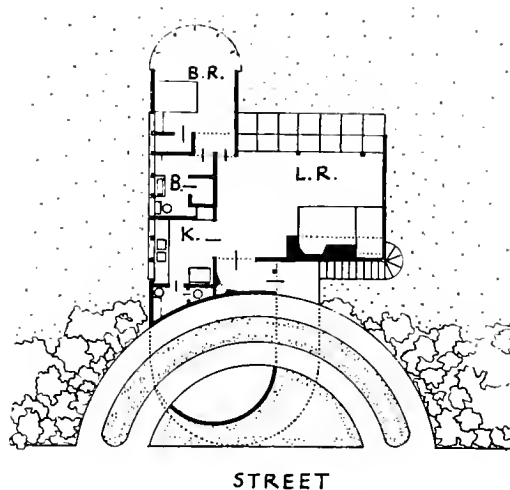


Photo by Fred R. Dapprich.

69. Entrance and car-port at night, of house designed by Harwell Hamilton Harris for John Entenza in Santa Monica, California.

The same ingenuity evident in the garage scheme I found in the utilization of every inch of space in this multiple-duty house. The roof deck, accessible by a spiral flight of stairs outside the front door, affords play space and an area for sun-bathing secluded by an enclosed balustrade. A semi-circular bay provides study space off the bedroom. At an extra push of the door into the kitchen, it becomes a bar. The elliptical bay of the unique garage contains a shower and lockers for bathers returning from the beach.

The garage Mr. Harris designed is actually only a car shelter—that is, a roofed space with open ends. Such car shelters, often closed at one end



70. Plan of the beach house in Santa Monica Canyon, California, designed by Harwell Hamilton Harris for John Entenza.

but protected only by an overhang of the roof at the free end, are much cheaper to build than the regulation enclosed garage. Where there is no danger of cars being stolen at night, or no need of a heated garage, such shelters are advisable; but they need to be planned in the whole entrance scheme so that the open ends are not too prominent in the first impression you receive of a house. Swing-up doors may be installed at each end of shelters so that cars can be locked inside them at night. The doors may be beam-controlled. A drive-through garage with beam-controlled doors is shown in the plan on page 147 of the house and grounds designed by James C. Rose.

REMODELING AN OLD HOUSE TO IMPROVE THE ENTRANCES. I mentioned in the beginning of this chapter that usually the entrances of old houses are not located where they would suit modern convenience today, and old stables are not usually located where they would serve as a garage handy to the house. The best example I have seen where all the old features of a house that were obsolete have been changed, and all the old features that give character to a place have been made more than ever enjoyable, is the Richard S. Humphrey home in Brookline, Massachusetts, after the architects, J. Hampdon Robb and Gordon Allen, and the landscape architect, Bradford Williams, had completed their work of altering, adding to and re-landscaping this historic little estate.

It is only an acre in extent, situated in the valley of a brook that cascades and winds its way west of the house and on into property across the road. The slope above the east side of the house juts out in a veritable natural fortress of puddingstone. The Englishman, Captain Cook, who bought the acre in 1827 engaged Andrew Jackson Downing, who has been called the

first great American landscape architect, to develop the grounds and probably to design the building, a simple, well-proportioned house, with a long sloping roof and Gothic influence tastefully adapted to the classic feeling that was in evidence in the early nineteenth century. The plain, tapering columns of the porch, probably a Georgian interpretation of the Roman Doric or Tuscan order, extend around three sides of the main house. The doors and windows are American Gothic. (See the photograph on page 71 of the east side of the house as it is today.)

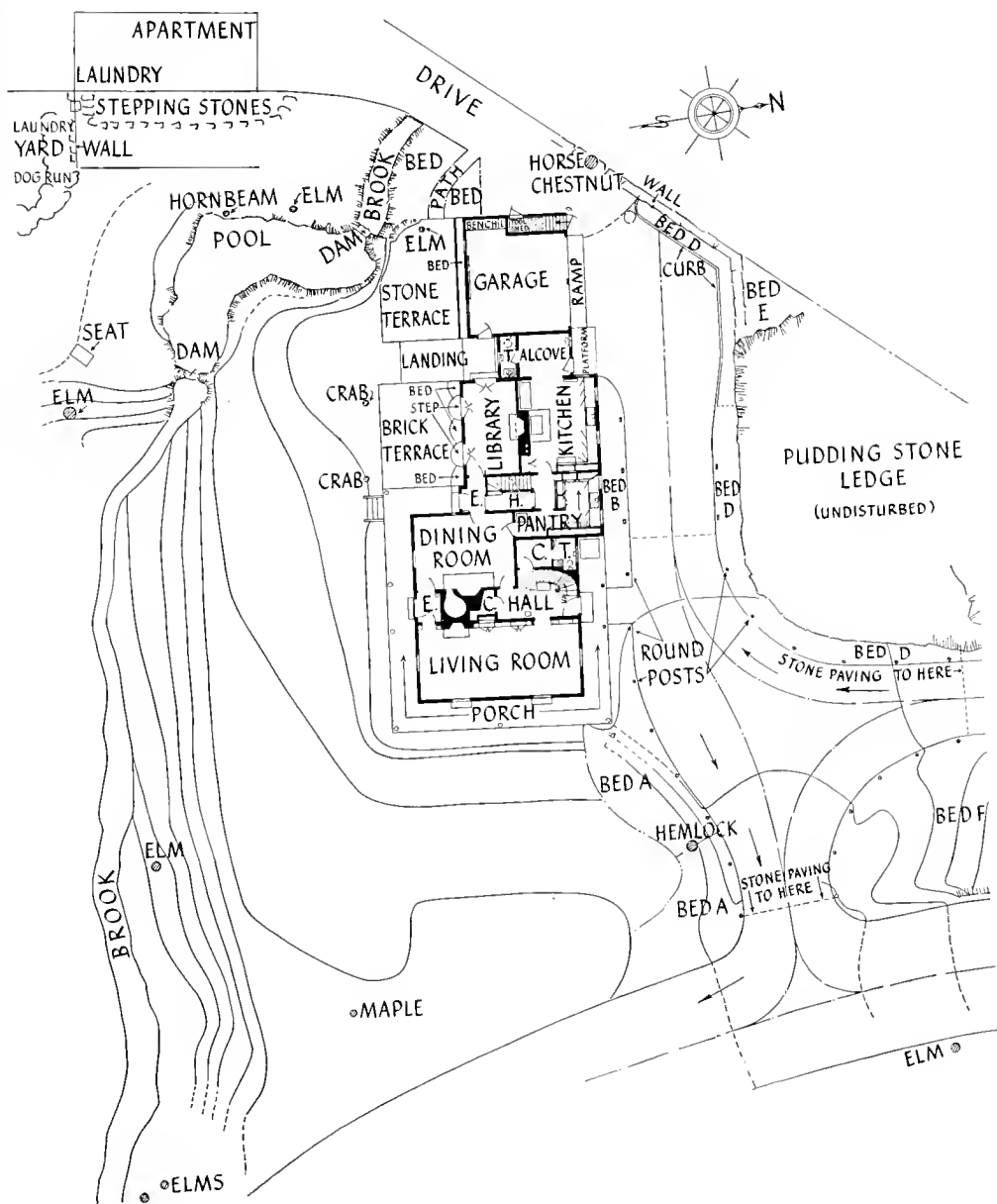
There were no doors on the south end toward the street. The original entrance door faced the brook. It was reached by a drive, topping a steep embankment, continuing past the west service door and ending at the stable, some distance back from the road and house. On the east side of the house there was only a narrow passageway between the ledge and the house, which Downing had flattened out for a path to an eastern door, just like the main west door, but seldom used. Among the problems the owners wished solved was a way to rearrange both the inside and the outside of the house so that living rooms and terraces might overlook the brook, and both driveway and service wing be located where they did not interfere with this plan. (See page 89.) The decision reached was to open the old east door as the main door, into an entrance hall and work out an entrance drive to it. The kitchen, with a service entrance and a garage wing to be built beyond the service wing, would then face this side of the house. The entire plan was so skillfully carried out that you see no scars in landscape or house, and never suspect the garage addition is new. What was the old stable became the children's playhouse, and is now a guest apartment and laundry with supplementary garage space.

THE NEW DRIVE. The most difficult feat, because of limited space and topography, was to construct a new entrance drive and blast out enough of the stone ledge that came close to the east side of the house to afford space for a turn-around at the door, and space for the drive past it to the garage at the rear. The driveway curves in from the street above the motor court, with the rock formation at the right, and curves out to the road again through a second gateway, still above the main house, so that the lawn and stately old trees to the south of the house and on the whole western façade are undisturbed by traffic. You would never guess, as you drive in from Cottage Street (named a century ago from this house) that the ledge on your right was not all of it a natural outcrop. That is because the stone that came out of it to make room for the driveway next the house, has been joined on at the end farthest above the house to make a continuous rock garden, in which heather, low spreading junipers, dwarf evergreen barberry, arabis, alyssum saxatile, and many creeping plants and vines



Photo by George H. Davis Studio.

71. The Richard S. Humphrey residence in Brookline, Massachusetts,
remodeled by J. Hampdon Robb and Gordon Allen.
Landscaped by Bradford Williams.



III

72. Plan of the Richard S. Humphrey home in Brookline, Massachusetts, remodeled by J. Hampdon Robb and Gordon Allen.
Landscape architect, Bradford Williams.

are growing in well-placed soil pockets, with holly, inkberry and andromeda toward the base.

The puddingstone bluff is a most attractive natural feature of the grounds, brought into prominence by the reorienting of the entrance, and fully lived up to by the present landscape treatment. In many localities a rock garden would be a fantastic importation. Here it belongs. In the chapter on making use of natural features of a site, on page 334, is a description of the work done both in planting and landscaping and in the building of terraces on the brook side of the house. In this chapter I am concerned only with the many details, including the planting, that distinguish the entrance side.

It was, for example, a happy idea to make use of the old stone posts with the connecting chains that had from the beginning played a part in marking the western boundary line. With the catenary curves of the chains silhouetted so strikingly against the white house and the gray rock, the effect is to make the new drive seem longer than it is, and make an observer conscious of each carefully chosen tree and shrub on the way. Another fortunate detail is the use of bluestone for the motor court in front of the door. If the gravel of the drive had continued clear to the door, a certain dignity and importance would be lost at the point where it is most effective. The plan on page 89 shows the section of the drive paved with stone.

THE GRACIOUS ENTRANCE DOOR. There is a gracious way of welcoming guests at one's door, which we can express in terms of structural and planting details just as sincerely as in the tone of our voice and the outstretched hand of greeting. The very doorstep is a symbol of our way of extending a hand. Steps with a narrow tread or a high riser bespeak a begrudging, forbidding attitude toward anything outside the house. An artificial arrangement of formal planting has the same effect on the approaching guest that assumed airs of superiority and patronage have on the part of a host. I do not know of any trend in home building more indicative of the times, more symbolic of a return to a simple unaffected way of greeting the world outside our doors, than in the change that has come over our front entrances.

If you wish to study some of them, turn to pages 141, 153, and 255. The entrance of the Long Island home shown on page 91 is particularly hospitable as well as practical. The paved forecourt of Belgian blocks brings cars almost to the graceful covered portico. Note there is a difference of only six inches in the levels between the forecourt and the house—in itself a pleasing feature. The difference would be more noticeable if there was a single six-inch high platform running out to the court. Instead there are two broad low platforms, easing the ascent, and the curb extends across the front of the slightly elevated beds for shrubs under the windows. The vines



Photo by Samuel H. Gottscho.

73. Main entrance at the home of Eugene M. Geddes at Locust Valley, Long Island. Architect, Bradley Delehanty.

and greenery are not severe in form, but welcoming notes. Thus graciousness without loss of dignity is expressed in every possible way.

The front entrance of the Humphrey house (see page 87) as it used to be was stiff and prim, awkwardly high above the ground, with an abrupt flight of steps up from the drive through a bank exactly graded at a steep pitch all across the entrance side of the house, to a front door that was reached by a narrow, steep doorstep. There was not so much as a shrub across the bank below the porch to mark a transition between what man had erected and what nature had so lavishly provided in the way of growing things. Study on page 88 the entrance that reflects the twentieth-century approach. The door itself, while on the east instead of the west side of the house, is a mate to the old door and not a reproduction. The doorstep is broad, and so close to the porch level that you hardly notice the rise at all. It is Bradford Williams's belief that no outside risers should be higher than six inches, and preferably less. Several broad treads, never

less than fourteen inches, and easy risers rather than a few steep, narrow steps, are the right means of bringing any house with its small scale into a harmonious relationship with the immensity of the outdoor spaces surrounding it.

There are no steep banks dropping away below the porch on any side of the Humphrey house today. The stone terrace of the motor court is almost at the level of the entrance porch. The deep green of the old shutters and door are brought out by the color of the evergreens to the left of the doorway, both the prostrate dwarf English yew and the upright Hatfield varieties—that relate the house to the site in a way as subtle as the placing of the tall cedar, also a rich deep green, at the last curve of the drive against the ledge. Without ever being trimmed, the cedar repeats the tapering lines of the Gothic arches of the windows and doors, and thus also helps the grounds take on the character of the house. A magnificent old hemlock that has survived a century stands near the exit of the drive toward the street. Other evergreens maintain the depth of green needed, both in summer and winter, to strengthen the planting against so much gray rock, in terms of the dark accents of the house. These evergreens consist of mahonias, laurels and small hemlocks. In Mr. Williams's opinion, native hemlocks are the only evergreen trees you can plant next a house of this type and have them look right. They have the dignity one seeks, plus the grace of line, delicacy and refinement of scale that accords with a New England house. I agree with him that we have overdone the heavy and formal type of evergreen in our foundation planting.

APPROPRIATE DRIVEWAY PLANTING AND WALL. To vary the evergreens, Mr. Williams has wisely chosen white English hawthorn and pink flowering dogwood along the left of the drive to the house. They lighten the landscaping effect, as the white painted siding and sky-blue of the porch ceiling lighten the house. The porch itself has always had woodbine hanging like a screen from the eaves, a marvel of green, gold and crimson when frost touches it in the fall. I had never seen the porcelain ampelopsis vine (*ampelopsis heterophylla*) used as effectively as here on the puddingstone ledge, where its clusters of brilliant turquoise-blue berries and bronzy foliage make a tapestry of color against the rock. The wall along the street grew out of Mr. Williams's suggestion of a wall in Godalming, Surrey. It is built of the same kind of stone that forms the ledge next the house, and is coped with slate in the typical English mitered fashion that in miniature recalls the Gothic-style windows of the house. This wall, so well integrated with the natural materials of the place and the character of the old house, serves the useful purpose of giving the grounds much more privacy than the hedge of half-dead hawthorn it replaced.

In many remodeling jobs, the change in the location of the drive, where it involves as much expense and construction work as it did here, would have been passed over as of no great importance. But since it was the only way to gain privacy for the brook side of the house, and that was valued as of great importance, everyone concerned—owners, architects and landscape architect—co-operated wholeheartedly in making the change. As a result, the house has been transformed from a delightful memento of a bygone age that never had the urge to live out-of-doors and was content to enjoy the landscape through the windows, to a livable home for a present-day family.

ORGANIZING THE BACKYARD

I HAVE SPOKEN of applying our belief in the value of living outdoors to our patios, porches and terraces. To be consistent we must carry the same principle of treating the outdoor spaces as rooms into the grounds beyond. Because the backyard is usually a small unit of space not attached to any other, it seems sensible to discuss humanizing that area so we can live in it, before proceeding to the more complex problem of organizing the house and grounds as a whole.

THE BACKYARD AS A VOLUME OF SPACE. In order to make the backyard livable we must first think of it as a six-sided cube of three dimensions, taking in the airspace above the ground. If we limit our conception to so much ground area and treat the yard simply as a flat plane beneath our feet, we lose all the opportunities to make it four times as effective by considering, as part of the design, the four planes that rest on the ground and the plane of an imaginary ceiling overhead.

When we think of a backyard as a volume of space, or "space garden," we are not increasing the upkeep or the cost of maintenance, because as the landscape architect Mr. James C. Rose explains, "most upkeep is on the ground area, in cutting grass, trimming weeds, cleaning pavements." We are considering the backyard garden area as living space for people. We do not organize our interior rooms as two passageways, one on each side of a central carpet with a focal point—perhaps a bench under a window at the far end. Why then should we organize our garden rooms by rule, just to look at with two paths on each side of a central mall leading to a summer house at the far end? We should organize them to meet the recreational needs of the people who use them. Creative landscape designers in the past have not been slaves to dogma.

PARTITIONS FOR INTERSPATIAL VISTAS. In the backyard garden treated as a volume of space, Mr. Rose points out, "we begin by partitioning the area for requirements of use, location and exposure to take advantage of all the natural elements such as view, slope of land, sunlight and shade. The partitions may be solid masonry walls, transparent glass, hedges, curtains, or merely the loose suggestion of partitions by a row of trees or posts. These may range in height from the lowest ground cover to the tallest tree. . . .

"This does not mean that we end up with a lot of compartments that are walled off from the rest of the garden. On the contrary, one of the essential advantages is that, except where absolute seclusion is desired, it is possible

to see and feel the full extent of the garden from any part of it. If we place the solid partitions below the eye level and only suggest the higher partitions by loose or transparent materials, we divide the space at intervals so that the vision of the observer is interrupted, but not blocked, by a succession and variety of tree forms. We have developed what is known as the interspatial vista which can be appreciated from any point in the garden and looking in any direction: it replaces the picture which must be looked at along an axis...."

ARRANGEMENT FOR USE AND BEAUTY. "The true test of skill is in the arrangement. The materials must be disposed to solve ever practical considerations of the site, and the use for which it is intended, and yet combined so that we get pleasing form not only in the material objects, but also in the spaces between them.

"We must not imagine the space garden is easy to design well, simply because it is compact in effect and utility. Wasn't it Cicero who said, 'If I had more time, I would write you a shorter letter'?"

THE NEED FOR GREENERY AND A PLACE TO SIT OR STROLL. Anyone living in a restricted space in an urban center of any size, craves the combination of green growing things to look out on and a place to stroll or sit in the midst of them. One of the most famous of the rear patios in New Orleans had a shady paved nook under a vine-clad balcony, where the owner, an expert chess player, was wont to meet his friends at the game, with the tinkle of jets in a fountain and the fragrance of a few raised beds of flowers and the rustle of leaves in the trees overhead to help him beguile the hours. We have cast aside many garden formulas of past ages, but we seem to have revived the enclosed, livable patio-yard for rest and leisure that the settlers from France and Spain established here, simply because it fits into the modern scheme for living out-of-doors.

PLAY SPACE. The *second need* in backyards today is often a place for children to play or space for older people to enjoy some active sport. When this need is paramount, because facilities for such are not readily available in a given city or town, the area devoted to planting is of secondary importance and may diminish even to the zero point.

THE PLACE FOR REFUSE CANS AND CLOTHES YARD. There is a *third need* which used to receive prime consideration. That was for a drying yard, and a place to keep refuse. The trend today is not to sacrifice space at the rear of the house for clothes line, garbage or ashcans. The growing use of commercial laundries, of oil or gas furnaces and of basement incinerators helps solve the problem. Receptacles for debris can be kept in a basement service

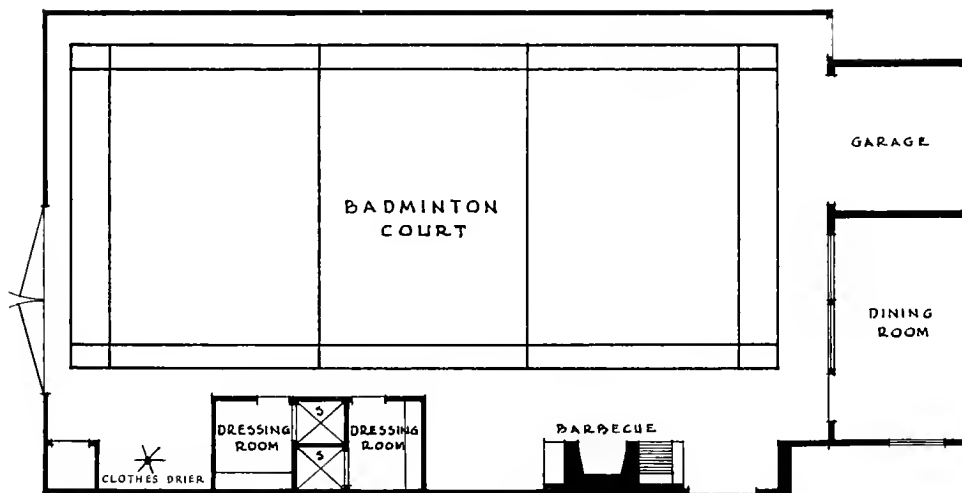
entrance at the front of the house, or at the side, or in a little shed-like structure at one side of the backyard. A garbage can may be buried where it cannot be noticed, behind a shrub near the door. Lines for clothes can be hung on flat roofs or be concealed behind a high hedge at the back of the yard, or inside a lattice-like enclosure covered with vines off at one corner. After one has been on a tour of city gardens, one comes back full of ideas on how to avoid losing space for any ugly utilitarian features. Later in this chapter, on page 119, you will find a discussion of an unusually interesting rear garden composition, in which the service area is included but with an enclosing wall to screen it.

A RECREATIONAL BACKYARD WITH NO PLANTING. Once determined to organize the backyard space so you can live in it, you must decide how much of an area to leave free for open spaces and chairs, and how much to devote to planting. In the rear yard of a beach house on Balboa Island, designed by Donald Beach Kirby, there is no planting whatever. The whole space, 30' x 46', is floored with green colored concrete, the surface slightly roughened to prevent slipping, and surrounded by a board fence. See the photograph and the plan on page 97. Children can roller-skate or ride their bicycles in it. Grown-ups can play badminton in the standard size central court, even at night, because there are floodlights at the four corners to make this possible. Closets are built into one side to store the nets and racquets and children's vehicles. Showers and dressing rooms for both sexes to use when coming back from bathing on the beach, or after a game of badminton, are along the fence on the same side as the built-in fireplace with a nook for dining table and chairs. The barbecue has an open grill on one side and a gas plate with solid steel top on the other, for cooking fish or hamburgers. Even a drinking fountain has been installed at one end of the bathhouse, a convenient feature saving players the trouble of running indoors when thirsty. A small clothes drier stands in the far corner, and can be collapsed when bathing suits are dry, and stored away. There is no up-keep attached to this very practical backyard beyond putting the hose on it when dust accumulates. A drainage basin catches surface water. The need for trees and plants, in an island resort such as this, where one is out and off to the beach or enjoying recreations that abound in the locality, is not so great as in a metropolitan city where one is surrounded daily by tall buildings, and seldom sees the country.

To free the entire yard for recreational use, the garage is built into the house. To reach it the family car is driven in from the alley at the rear of the yard and across the badminton court. The whole design is a feat of economical arrangement.



74. Barbecue and badminton court in Carl T. Long's residence at Balboa Island, California, designed by the architect, Donald Beach Kirby.



75. Plan of backyard in Carl T. Long's residence at Balboa Island, California. Architect, Donald Beach Kirby.



Photo by George D. Haight.

76. Backyard in the Chester Lincoln residence in San Marino, California. Architect, H. Roy Kelley; landscape architect, Wilbur Davies.

A COMBINATION PLAY AREA AND DINING TERRACE. In another California backyard, in San Merino (shown above), the space is divided so that the third of the yard nearest the house is a brick-paved dining terrace, under a large and beautiful live oak tree, adjoining a little sheltered section under the sun-deck and the stairs that lead from upstairs bedrooms to the yard. Here the family eat all their outdoor meals. Except for an opening near the house, a low brick wall separates the whole living area from the remaining section, which is given up to a badminton court for the younger members of the family, equipped with a drinking fountain at one side.

As this rear yard has a southwest exposure, it could be used many months of the year for outdoor living, hence the landscape architect, Wilbur Davies, wisely designed it for the greatest possible use in this way, and the architect, Mr. H. Roy Kelley, planned the interior so that both the living room and study downstairs, and the upstairs bedrooms, have access to it. See page 99.

MAKING USE OF TREES AS CENTERS OF INTEREST. Wherever trees are growing in a backyard, they should be utilized as the pleasantest kind of shade to sit under. In the case of the Chester Lincoln yard, just described, the live oak tree is the center of interest for the whole dining area. The paving comes to within a few feet of the trunk, and a built-up curbing one brick high around the tree provides the little basin of cultivated soil through which the



Photo by George D. Haight.

77. Stairway and sun-deck at the Chester Lincoln residence in San Merino, California. Architect, H. Roy Kelley.

roots receive water and nourishment. Either this central soil basin or the arrangement for watering described on page 148 in Chapter V, is most necessary where shade trees are surrounded by a paving laid on a gravel or concrete base. It is less important where moisture can also seep down, as here, between bricks laid in sand.

I was charmed with the simple but effective way the landscape architect, Ralph Cornell of Los Angeles, has planted and utilized a viburnum tree as the center of a sunken, circular lounging terrace, in the wide shallow backyard shown on page 100. By making the area for people to sit in a definite flagged circle near the library door next a corner of the house, he had an unbroken expanse of turf as the outlook for the other rooms at the rear of the house, as well as for the terrace outlook, a much wiser plan than a central division of space, which would have left two almost square sections in the yard. It was not as easy as it may seem to work out that casual entrance from the rather high floor level of the library, first onto a little balcony, then down to lawn level, and then by easy curving steps to the terrace level,



78. Sunken terrace around a tree in backyard of the Barton Hepburn residence in Beverly Hills, California. Architects, Webber and Spaulding; landscape architect, Ralph Cornell.



Photo by Ralph Cornell.

79. Approach to the sunken terrace at the Barton Hepburn residence in Beverly Hills, California. Landscape architect, Ralph Cornell.

using wrought iron for its delicacy as a balustrade. The descent as shown on page 100 would have seemed abrupt and steep had it been directly down from the door. This approach is well related to the house, because it is made of the same kind of old mortar-stained bricks, even to the retaining wall that bounds the sunken terrace. In contrast to the small scale of the bricks, the large sized terrace flagstones, buff and gray in color and of random shapes, add variety at the right point.

A SUNKEN TERRACE. The sinking of this little terrace is an excellent idea for several reasons. The difference in levels thus created establishes interest and importance to the section that deserves to be distinguished in some way. It is practical because the low 16" walls make a ready-built seat when a large group is being entertained out-of-doors. And finally, one has a cozy, intimate sense of being in a sheltered room and yet close to green things when sitting at a lower level.

A TREE CLUMP AND OTHER PLANTING. The picture cannot do justice to the bright berries that adorn the viburnum in the California winter, but does show the graceful lines of the slender trunks. I so often wish people would let their yard trees grow in a clump if they start that way, or select this type of tree from a nursery if the clump effect is desirable. Unless a house is on severe formal lines which one wishes to repeat in exterior planting, I see no reason for having every tree prim and geometric in form. Some grow that way naturally. Others are loose and open. It is important to select the type that will give the right effect by its natural growth. You feel the viburnum tree in the sunken terrace was an inspiration just suited to this place. To get such a result with absolute economy of means is to have created a work of art.

NEW YORK CITY BACKYARD PROBLEMS. Planting the backyard of a New York City house, with its typical narrow width and the towering height of the surrounding houses, requires as much skill as organizing a tiny shaded room so that it seems adequate for its purpose, restful and attractive. Such a backyard gets direct sun for only a few hours each day, so that anything planted there must get along in shade. Furthermore, because it is like the bottom of a well, wind and air does not circulate freely to dry up evening dews, fogs and rain. So the planting must be able to survive dampness. Then the soot and cinders, soft coal dust and fumes from various river industries, offer further obstacles to the existence of shrubs and plants. In many cases, evergreens will not survive more than a year. The topsoil impregnated with soot should be renewed each season. But notwithstanding all these restrictions, designs and plantings have been worked out with great success.

A PLAN WITH THINGS HAPPENING IN IT. Mr. Edward Shepard Hewitt, whose country home is shown on page 7, has designed many gardens in New York City, and carried out some of his ideas in his own city residence, a five-story brownstone house with a rear yard 50' long by 18'9" wide. When he first came here, a long addition used as the service wing extended into the yard, which was anything but a cheerful sight. The extension was torn down and the kitchen and pantries moved to the front of the house, with a basement entrance in which cans could be stored under the outside stairs to the front hall. The dining room was placed at the back, with full-length doors and windows at each side commanding the garden facing the south. Unsheared privet, allowed to grow tall and assume a natural spreading shape, was planted at each side of the door, with Rose of Sharon bushes next them, one of the few flowering shrubs that will bloom in such a damp, shady yard as this. In front of the doorstep a hexagonal brick-paved terrace was laid, so that chairs could be put out on sunny days. In the center of the terrace, a low goldfish pool, also six-sided, helps to create those events which one has to have happening all through a small garden surrounded by high buildings, in order to make up for the lack of space inside the walls and the lack of distant prospects.

A GARDEN SECRET. If anyone supposes that because one has limited space, the way to preserve a restful effect is to have nothing intervene from one end of the yard to the other in the way of interest, he will find the opposite to be true. Granted that the little patterns of planting, pools and paths are not overpowering in scale and do not cut off all the vistas, you will discover what the landscape geniuses of all ages have known. The secret is that by giving your eye and mind something to follow through a small area, both at ground level and in the upper spaces reached by vines and tree branches you feel the distance is greater from end to end or across than if you take it all in at a glance.

A GROUND COVER AND TREES THAT WILL THRIVE. In many cities, grass can grow in the backyard, but in the Hewitts' case some substitute ground cover was necessary. They have solved their problem by means of rectangular beds with cut corners planted solid with Japanese spurge, *pachysandra terminalis* except for a border of ivy and a low, clipped hedge of privet to outline the beds. The brick path between the beds leads to a paved area against the back wall, for chairs and a bench in the shade of trees growing in this terrace. They are worth noting, as they thrive, and many city dwellers despair of finding trees that will. One is a honey locust, not often seen in city backyards, one is an ailanthus, common but none the less worthy of respect, and lastly, there are two Siberian elms. An old purple wistaria grows up five stories to the housetop from outside the dining room windows here,

but never bloomed until Mrs. Hewitt planted another wistaria on the other side. Now both are prolific with blossoms in June. Funkia does well against the low wire fences on two sides of the garden. Tulips and other bulbs are the glory of city gardens in the spring, and this is no exception.

Wherever property owners will use low walls between adjoining yards, or walls of opaque or corrugated glass which let light through, or allow the whole central area enclosed inside a block of houses to be treated as a garden and pass laws forbidding the rear extensions of structures that keep the sun out, much more can be done in varying the planting material; but as that becomes a community project, I will confine myself to the private yards.

RELATING THE HOUSE TO THE YARD. Architects are doing astonishing things to relate the garden façade of city houses to the yard, and to offset the perpendicular lines that the high narrow houses make as you sit in the backyard. Too often in the past the designer of a building has been oblivious to the outdoor surroundings, perhaps because the client did not care about bringing house and yard together; but now both landscape designers and architects have a common problem if the city house is to fulfill modern needs.



Photo by Van Nes-DeVos, courtesy of House Beautiful.

80. Rear façade of the residence of George A. Brownell in New York City, remodeled by the architects, Harvey Stevenson and Eastman Studds. Planting by Wadley and Smythe.

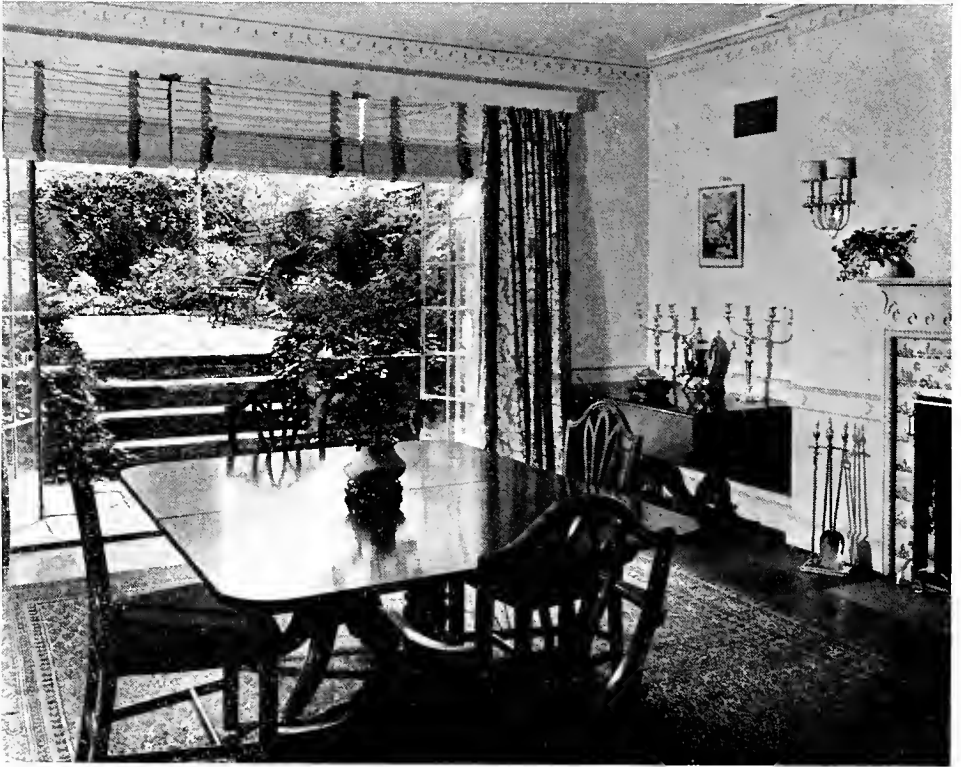


Photo by Van Nes-DeVos.

81. View of the garden from the dining room of the George A. Brownell house in New York City. Architects, Harvey Stevenson and Eastman Studds.

In the New York City house remodeled by the architects Harvey Stevenson and Eastman Studds, for Mr. George A. Brownell, the whole rear end of the former brownstone house has been almost miraculously opened up by means of a wide, rounded bay on the living room level, and by a series of glass doors below that fold back almost across the width of the dining room. These new openings accentuate the horizontal lines of the rear of the house, and so do the two balconies so ingeniously adorned with modern wrought iron work of a classic Greek design, and the entablature above them. The photograph, page 103, shows that as a result, the house seems wider and lower than adjacent houses of the same size. Furthermore, the balconies make you feel more in touch with the out-of-doors because you can step outside, and in the case of the lower balcony, a trellis at one end can be lowered at will, with a flight of steps thus revealed to descend to the terrace below. The basement dining room is on intimate terms with the garden, because you look up the four steps into it through the wide expanse

of the folding glass doors. (See page 104.) By using putty colored brick, the architects have lightened the house wall most agreeably, and toned it into the light, natural color of the flagstone terrace. The fence affords privacy, but also allows air to penetrate by means of lattice-work along the top, almost hidden by Chinese fleece vine (*polygonum auberti*), bitter-sweet and wistaria.

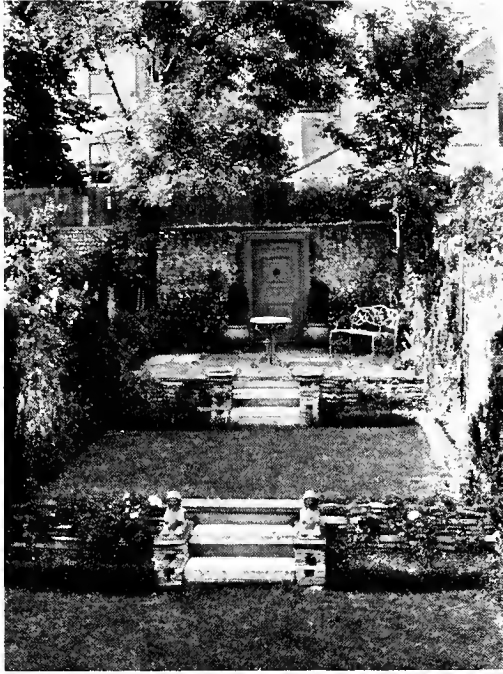


Photo by Silvia Saunders.

82. Terraced backyard in the home of Edward Knoblock in the south of England.

A TINY BACKYARD IN ENGLAND. Most of the sitting areas in the backyards so far mentioned are close to the house. I have one photograph to show you of a very small backyard in southern England (see above), where the playwright, Edward Knoblock, has located his sitting area at the far end of the garden. The whole space is only seventeen feet wide and forty-six feet deep. The ground sloped from the far end down toward the house five feet below. The simple plan here evolved was to break up the forty-six foot depth into three squares of equal size, and grade the slope into three level terraces, each two steps below the other, with retaining walls of dry flat stones between. In this way the illusion of distance between the two ends of the garden is gained, which I have already spoken of as important in a small secluded yard. The high surrounding walls are of rubble stone, which

show through the old mortar. It would be possible to have such a high wall as the picture shows with a door in it across the back of any yard, where the only place for clothes to dry might be hidden away behind it. In this case, the door leads into an alley.

If you observe carefully, you will see that the two grass terraces are bordered with an edging of germander, and that the slender upright Hicks yews and climbing roses grow up against the side walls. A large bush of any sort would take up too much space. The lower branches of the two trees in the far corners of the garden have been cut off to keep the space as open as possible, and still afford some shade at tea-time.



Photo by Silvia Saunders.

83. Backyard in the London home of Major K. Christie Miller.

THREE LEVELS TREATED DIFFERENTLY. I have another backyard on three levels, to illustrate what interest can be achieved by treating each level in a different way. This one, belonging to Major Christie Miller, in London, and shown just above starts out as a paved terrace next the house, with a very low stone parapet at the edge on which potted cinerarias in season make a great show of color. Down two steps is a gravel court used for out-of-door meals, designed as an elongated oval the width of the yard, with

a grass border backed by low beds of flowers against an ivy-clad wall. Opposite the main entrance into this gravel court is the path down two more steps to a shady grove of trees. At each side of the court the gravel is extended as part of the design into a space big enough for out-of-door furniture to be placed against the wall.

SUITING THE GARDEN TO THE HOUSE AND THE OWNERS. The division between the gravel court and the grove is maintained by a low balustrade of stone columns, in keeping with the architecture of the formal Georgian house. If you start out with a stately, dignified house such as this, because you live an ordered, stately life, then you can't go cottage-gardenish in your landscaping. A more or less geometric pattern suits this type of place, with plenty of restful space, old trees and a clipped, ordered effect in the planting. This is not obsolete by any means. Good modern style in house or garden means avoiding copying some era in the past in externals, and not going to some faddish extreme that seems fashionable for the moment. It means adhering in house and grounds, in plan and materials, to what your own manner of living, and your site, demand. It means achieving the greatest possible beauty through the greatest possible use.

OLD TRADITIONS AND NEW IDEAS COMBINED. It often happens that an original, modern landscape plan that truly fits a given situation will bear a likeness to some age-old garden, because of an inner similarity of aims. We should know some of our traditions so we can appreciate where we differ from them and where we agree with them. The geometrical layout of Lady Forres's London backyard (page 108) illustrates my point. In all ages and all countries there have been geometric designs of beds, surrounded by paths surfaced in some way to offset the planting. The beds you see here along a wall, in which standard tree roses grow amidst a ground cover of lavender are part of the English tradition. A bit of English history is revealed in the old mulberry tree that affords shade for a swing in the lawn section of the garden. Back in 1700, many such trees were planted in what was then the country around London, because it was thought the raising of silkworms might become a possible source of livelihood. The idea was impractical so far as the silkworms were concerned, but the mulberry trees survive as very enjoyable shade trees today. The lawn at the end opposite the raised platform against the street wall, with its perennial flower border, is traditional both in England and America. One cannot ignore that tradition either, when it serves our need.

What is conceived in the modern spirit here is the raised terrace against the street wall, with a garden house built into the far corner, its glass doors affording easy access to the terrace. (See page 108.) Pots of flowers and some small pieces of sculpture are ranged along the edge, and there are

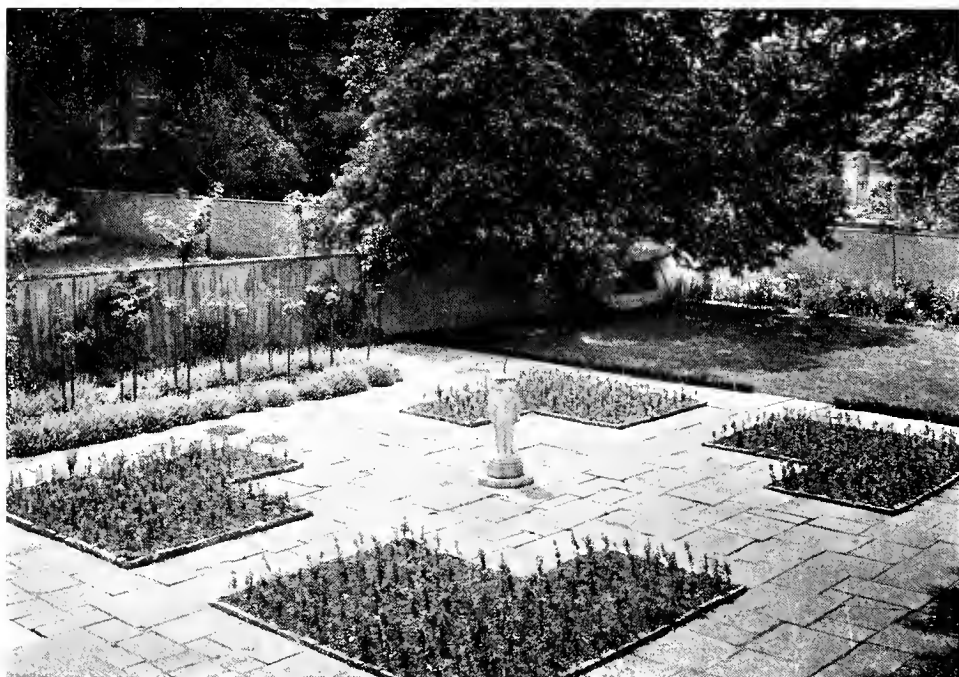


Photo by Silvia Saunders.

84. Lady Forres's backyard garden in London. Designer, Oliver Hill.



Photo by Silvia Saunders.

85. Raised terrace against the wall in the backyard garden of Lady Forres in London.

garden chairs to be brought out when the family is in residence. The series of broad flat steps that go up to the terrace is very decorative, and quite in the modern spirit of making what is structurally useful in the garden so beautiful in design that extraneous gadgets are unnecessary.

Furthermore, the paved areas around the raised beds are so spacious that you feel a large gathering of people could sit or stroll without getting in each other's way. This is the reverse of the usual geometrical formal garden, where the planting areas are predominant and the paths are just wide enough for perhaps two to walk on. The modern idea, where one entertains large parties, is to subordinate the planting space to the space for people, but bring the two together. The paved area is decorative as well as useful because of its unusual deep salmon color, which has been repeated in the brighter salmon tones of the snapdragons in the little beds.

PATTERNED GARDENS ARE SUITED TO CITY SURROUNDINGS. Patterned gardens such as I have just described are particularly suited to small backyards in cities where the surroundings are so largely architectural, and "natural" effects are counter to the sophisticated atmosphere. Patterns for planting suit the scale of the site, where much interest must be created in a little space. They cut down on the amount of ground under cultivation, an important consideration because it is so difficult to make any ground fertile



Photo by Silvia Saunders.

86. Backyard garden in Washington, D. C., at the home of the landscape architect, Rose Greely, designed by her.

and capable of sustaining plant life under city conditions. Small beds with definite curbed edgings to hold moisture are much easier to cultivate and water than a large plot. Small beds look silly unless they are arranged in a definite pattern that conforms to the shape of the garden area. Paths are, of course, part of the pattern and very necessary to gain access to the various beds. Trees and shrubs and architectural structures are needed to develop the "space garden" of three dimensions. Such a patterned garden tends to be formal, but can at the same time avoid stiffness by means of casual planting, free-growing trees and shrubs, loose and open in character (see the list on page 343), shady places to sit, with chairs arranged invitingly, variations in the plan that break the perfect symmetry of the patterns.

TWO SMALL PATTERNED GARDENS IN WASHINGTON, D. C. The London garden just described represents the more formal treatment. The garden of the landscape architect, Rose Greely in the Georgetown section of Washington, D. C. (see page 109), represents a more intimate kind of garden, one with more privacy because of its smaller scale and the layout and surroundings. The old brick house, with the projecting wing, makes the background for a secluded corner for chairs. The woven wood fencing of weathered chestnut held in place by twisted wire, the old tree, many vines, and tubs



Photo by Silvia Saunders.

87. Path in the Washington, D. C., backyard garden of Mrs. William Hurd Hill. Landscape architect, Rose Greely.



Photo by Silvia Saunders.

88. Mirrors in the wall of the backyard garden of Miss Frances Sortwell in Washington, D. C. Landscape architect, Rose Greely.

of oleanders maintain interest above ground level and keep the atmosphere casual despite the geometrical ground pattern of the design, with its box borders, gravel paths and brick curbing.

The garden Miss Greely designed for Mrs. William Hurd Hill, also in Washington, has a path out from the door toward a brick wall a short distance away, made interesting by the pierced effect in the brickwork and climbing roses that entwine the railing at the top of the wall. A statue of a child is well placed at the end of the path, backed by evergreens as shown on page 110. The planting all the way down is a perfect delight. One can approach the figure from the intersecting side path as well as the path from the door. The whole treatment bears out one of Miss Greely's strong convictions, that one must have different ways of getting from one point of interest to another, and have it fun all the way.

OUTLOOKS ADD LIFE AND MOVEMENT. Where possible, Miss Greely introduces into her garden designs some kind of lookout away from the house, which gives one the incentive to explore the paths and see where they lead. In other words, even in a city backyard the idea of letting the house be the starting point to go somewhere else should find expression. It adds life and movement to the design. In the garden Miss Greely designed for Miss Florence Sortwell, also in Georgetown, the vista at one side of the yard is

terminated by a brick wall in which there is a beautifully proportioned triple archway with openings you think at first give vistas into another garden beyond. See the picture on page 111.

THE USE OF MIRRORS. As a matter of fact, the openings in the wall are faced with mirrors which reflect the one garden you are in. This is a unique and highly successful way of making the garden seem twice as extensive, and of obtaining the effect of an outlook where none is possible. If you should be inspired to work out a similar treatment, decide first what you want to have reflected in the mirrors. Then place them where you will get the best results. By having the mirrors recessed a little, as here shown in the photograph, they will reflect the jamb of the sides of the piers and the arches, giving an effect of great depth and thickness to the wall. Such mirrors need to be bedded in a caulking compound and made watertight with flashing at the top.

A shallow pool, with a pair of potted calla lilies in it, is situated at the base of the triple mirror, with flowering fruit trees at each side and a border of violets and narcissus. Wistaria grows over the top of the wall.

A SIMPLE DINING ARBOR AND NICHE. In the same garden, in a corner framed by the house and the high garden wall, Miss Greely has planned a dining alcove for the owner by the simple device of building a lean-to arbor of white painted timbers out over the space taken by table, the built-in seat and chairs. (See page 113.) When more people recognize the value of many places to sit on one's grounds, there will be more gardens with the livable quality of Rose Greely's.

You would be surprised to see how effective the little niche is in the wall over one end of the bench. It was designed by Conrad Kramer to display a pair of antique Chinese doves perched on inverted flower pots, with a cut-out tin decoration of leaves at their feet and with candleholders projecting from each lower corner of the niche to light the supper table on summer evenings.

There is all the difference in the world between an arrangement such as this of small, simple but genuine art treasures set into a niche in the structure of the wall, where they can be seen at close range, adding considerable interest to a secluded corner, and the banal bric-a-brac one often sees in gardens, neither good in itself nor used with significance in an appropriate setting.

THE STANDARDIZED GARDEN FORMULA. One of the best ways of being positive about the result we want in our backyard composition is to know what we do not want. The path of least resistance is to follow formulas that result in a standardized garden plan, which looks like a dress pattern for a perennial type of figure with perhaps just a new trick sleeve added. One of these



Photo by Silvia Saunders.

89. Dining alcove in rear terrace of Miss Frances Sortwell's home in Washington, D. C. Niche by Conrad Kramer.

formulas which has been stressed to the breaking point by mediocre designers is the need to build our composition around a central axis.

WHAT IS THE AXIS? An axis is an imaginary straight line between two points on which to balance the elements of a composition. But one can balance a composition on a curved line. An axis need not divide an area in half, but that is the way it is generally interpreted. There can be more than one axis in a composition, but the axial plan usually stops with a main axis and one or more cross axes.

As most of us are poor swimmers in the unknown waters of landscape design, we cling to an axis as to a lifeline, and feel if we follow it we cannot come to harm. What we need is more self-confidence, more freedom from this one formula which results in a static, stereotyped balance, and familiarity with other more subtle ways of balancing the elements of a composition.

THE NEW GOSPEL FOR MODERN GARDENS. Over and over, when I see a modern house, I am sorely disappointed because the landscaping around it has nothing that carries out the flexibility, the imaginative freedom, the organic and dynamic quality of the architecture. The remedy, I am sure, is not to be found in imposing architectonic methods on outdoor spaces and natural forms. Trees are not so many nodules of prefabricated material!

The modern landscape architect, Garrett Eckbo, like James C. Rose, is preaching a new gospel of areal design as opposed to axial design; in other words, the conception of an outdoor area as a volume of space already mentioned, which has a vital bearing on our need to expand, recreate and enlarge our ideas of garden composition. In a recent issue of the *Magazine of Art*, he says:

"Axial design and its close relative, bilateral symmetry, are far too often merely forms which make thought unnecessary. Axes are only the center lines of areas, and there seems no more reason for emphasizing them outdoors than in. People live in areas not on axes.... There seems to be no reason why landscape design cannot work in terms of areas whose forms and relations may have little or no dependence upon an axial skeleton, and yet have an order which is not an imitation of nature. Nor does there seem to be any reason why one side of an area should be exactly like the other merely because it has a center line. The scenes of nature are seldom either axial or symmetrical, architecture has abjured axial symmetry, therefore why should landscape design continue the use of this devitalizing dogma?"

There is also, as Mr. Rose points out, another practical consideration. "Plants, as well as people, require certain conditions for their best growth (shade, sunlight, soil conditions, air, space). The axial garden builds up an artificial symmetry for its own sake with little consideration of either the

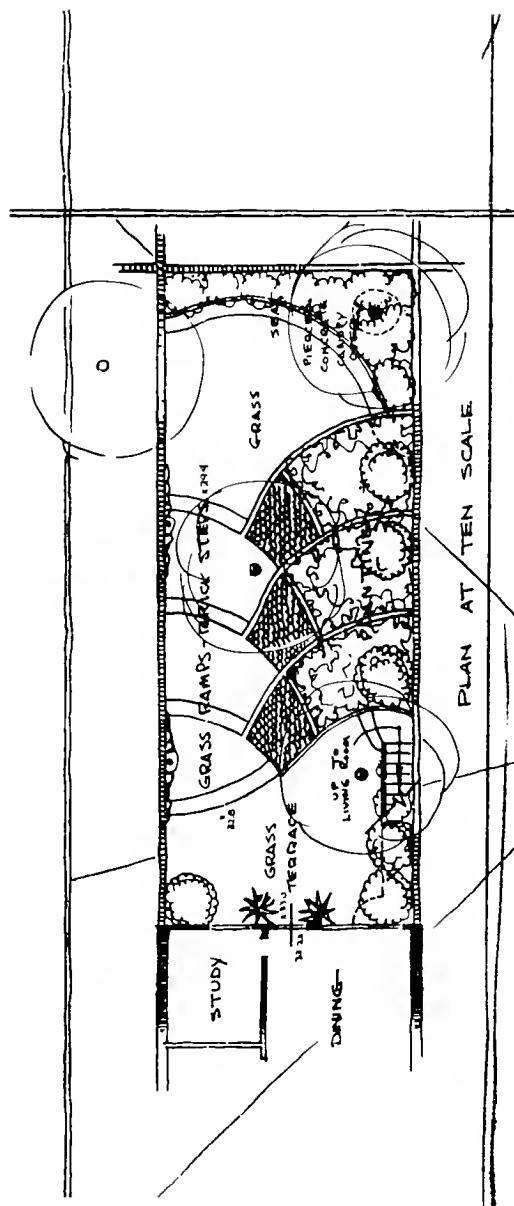
way people live or the way plants grow. For instance, if you have a rectangular garden with a wall or hedge on the long sides, if the conditions of light and shade are right for the flowers on one side, they are wrong for those on the other. If different flowers are used on each side to satisfy the conditions which have been built up arbitrarily, the symmetry is lost. This goes all the way through landscape planning. It is the reason why the new type of garden is seldom symmetrical, although it has balance."

PEOPLE LIVE IN VOLUMES, NOT PLANES. When we organize our backyards as living rooms, we find the areal kind of design best suited to our purpose. Things must then be around us and over us as well as under us. "A living area fails," Mr. Eckbo says, "if it does not make one conscious of being within something, rather than on top of something. It must have scale, it must have enclosure, it must have a third dimension. Trees more than any other element give us the third dimension and the feeling of volume to the garden area, in addition to their shading and screening function. Various sorts of canopies and pergolas, of concrete, metal or wood are also used for shade and enclosure. . . . The harshness and blankness of enclosing walls is softened by murals and planting, or nullified by mirrors. Where walls become too high, opaque glass panels are used in the upper portion. Walls completely constructed of glass blocks would be a most delightful innovation."

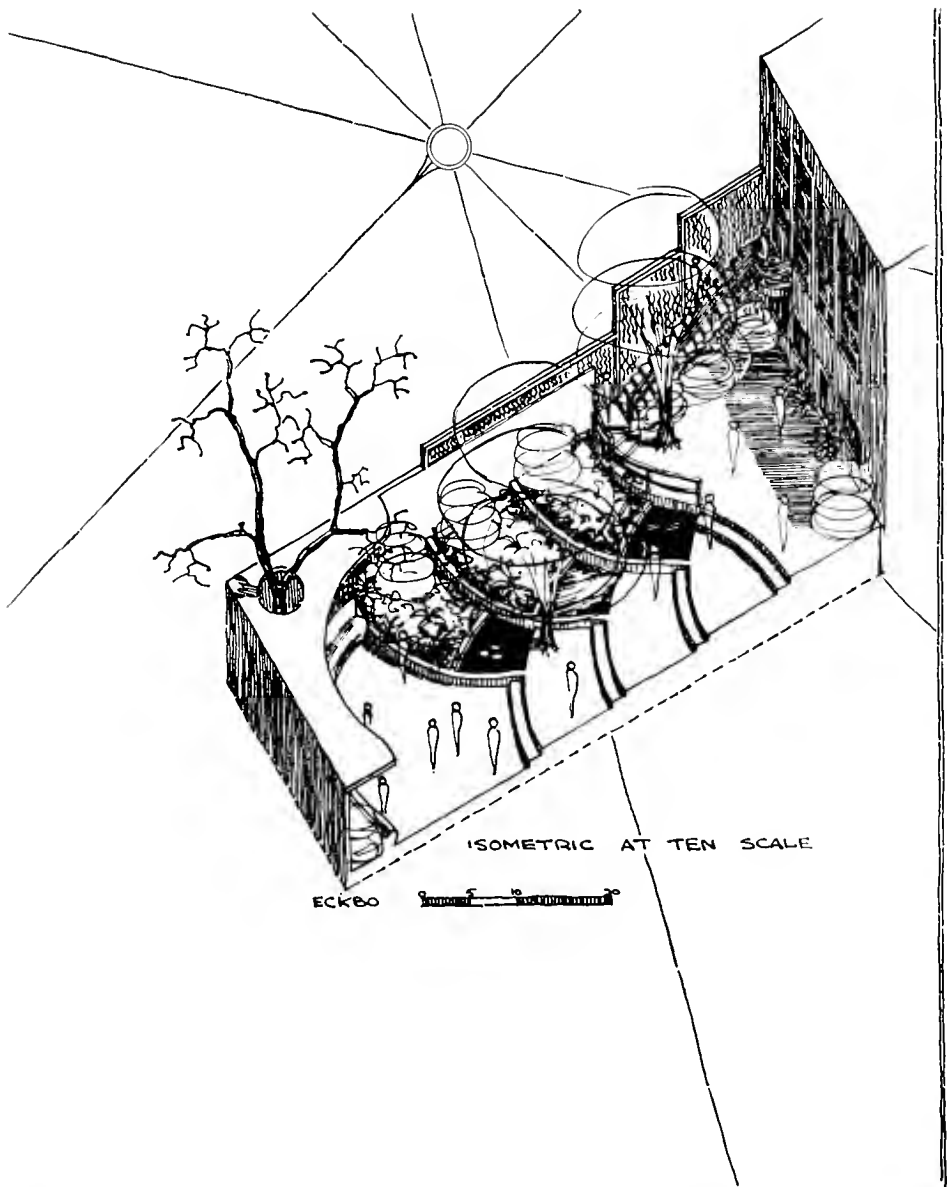
GARRETT ECKBO'S CITY GARDEN DESIGNS. Mr. Eckbo designed eighteen city gardens as an experiment in the abstract, to carry out his theories. In them he has used "every resource of imagination and ingenuity to make them not only livable, functional and spatial, but delightful, entertaining and amusing. They all have movement. There is no careful static symmetry. The eye is carried around the area by clean, free curves or strong angles, and is not forced to concentrate on any one point."

He pays special attention to the problem of "masking or nullifying the restrictions of small areas and developing a consciousness of space." The rectangular area he uses for his designs is "warped, twisted and re-shaped at will to a forgetfulness of the hard enclosing lines. Portions of the area are wholly or partially screened to suggest additional space, by the impossibility of seeing everything at once. Connection of the garden with the second floor helps integrate the two, and free circulation without retracement of steps increases spatial feeling."

A RHYTHMIC ABSTRACTION OF THE NATURAL CONTOURS OF THE GROUND. I have chosen for inclusion here one of his designs (on page II6), which has got away from the enclosing lines of the rectangle by a series of terraces in rhythmic, crosswise curves which symbolize, in abstract lines, the natural



90. Plan by the landscape architect, Garrett Eckbo, for a city backyard, based on contour curves.

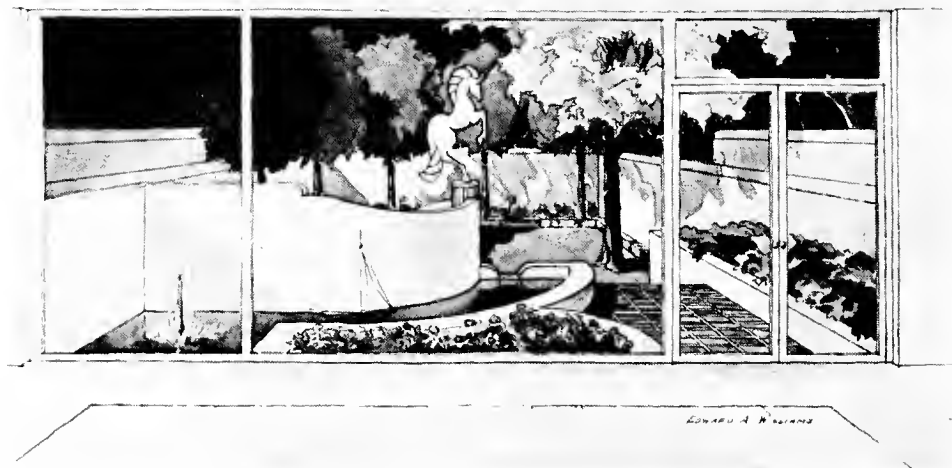


91. Sketch by the landscape architect, Garrett Eckbo, showing isometric of a city backyard.

curving contours of the ground one often sees. His ramps are of grass, his steps between are of brick, and he has as many pools, in angular designs that are most original, as there are levels in his ascending terraces. He has stairs up to the second-story living room of the house, integrating the house and grounds. There is a raised terrace at the house end of the garden, and another on a lower level at the far end, with a canopy of concrete over it, again in dynamic curved lines, through which a tree is allowed to grow.

There are trees of small open shape on each grass terrace, but his drawing in perspective, on page 117, indicates them by whirling lines which enable one to see the rest of the design. The walls that enclose the yard as you come down into it from the terrace next the house, are of opaque glass. While the design would be expensive to carry out, it has so much vitality and stimulates our imagination so much, I feel it is worth studying.

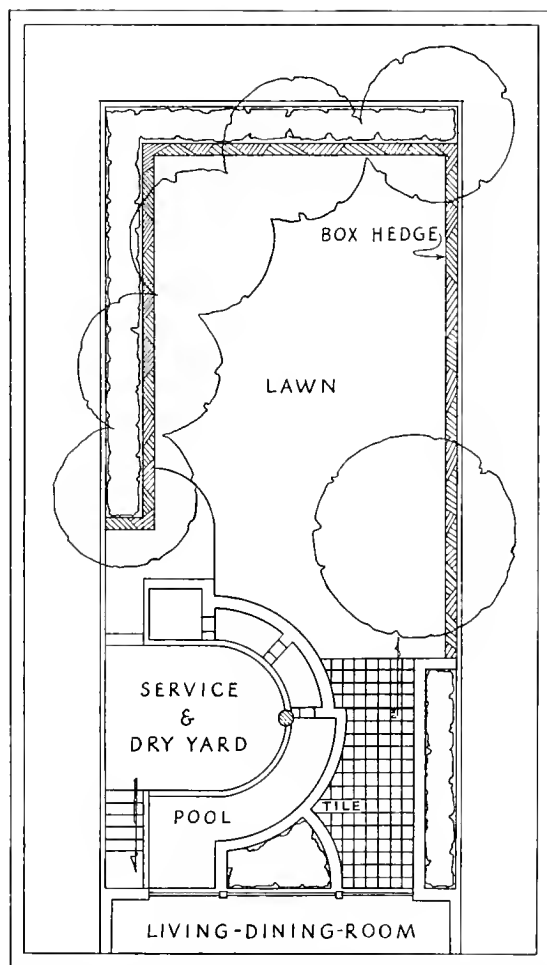
Mr. Eckbo likes to use vital and vivid sculpture freely in his gardens, but not the insipid, gardenesque kind commonly used. He places it "boldly and appropriately, not in a condescending or half ashamed manner."



92. Sketch by the landscape architect, Edward A. Williams, for a terrace and backyard garden.

SCULPTURE IN A DISTINGUISHED DESIGN. The figure of a horse on a pedestal is to be seen above as the chief interest on the lower level of the backyard planned by Edward A. Williams, of San Francisco, for a sloping lot. His is a stunning creation. The terrace has raised beds of blue flowers in a free flowing curved design that could never be called static. It is placed where it can be seen from inside. Behind the flowers is a reflecting pool, supplementing and repeating the curves of the flower bed, with a sailboat in it leaning against the enclosure of concrete. This wall is terra cotta in color, coped with cream. The copings are acid-treated to produce a roughened texture. The wall makes a subtle down curve at the stair entrance, and continues with water basins next it down the steps to the lower level of the lawn where it serves to enclose the service area, as the plan on page 119 shows. Around two sides of the yard are beds of flowers and trees against the garden walls. But when we try to put trees into flower beds with the idea of increasing the spatial feeling and the feeling of overhead volumes, we must

be careful to choose trees such as dwarf fruits without too much shade or without encroaching surface roots if we wish flowers to grow under them.



93. Plan by the landscape architect, Edward A. Williams, for a terrace and backyard garden.

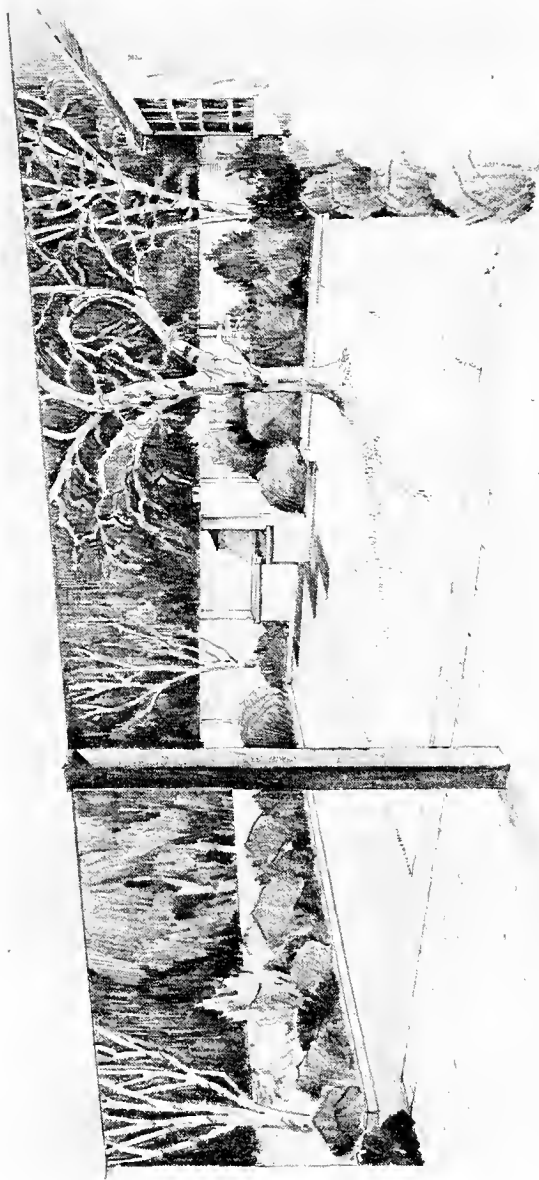
BALANCE WITHOUT SYMMETRY. The design of the terrace is intended to be enjoyed from inside the window. The door placed at one side of the interior room opens onto the part of the terrace intended as a passageway, bordered with another raised bed of flowers. There is no bilateral symmetry here, but there is a subtle balance between the tiled walk, with its bed at the right and the design on the terrace at the left, with its several interests—the flowers toward the center, the water to the left—and the curving enclosure, with its change in height marking the transition to the lower level, and af-

fording the interspatial vista of the lower level which would otherwise be blocked.

A SUBURBAN BACKYARD GARDEN. In the patio design for Mr. and Mrs. Carlton E. Byrne (see sketch, page 121), Mr. Williams has worked out a simple, direct plan that would suit the backyard area of many suburban homes much better than the ground patterns often used in city backyards to offset the lack of natural material in the surroundings. The idea here is to enclose the space, but not necessarily with walls of the same height all around. It is to provide free open space for a lawn and a few trees, and a gathering place for people away from the house around an outdoor grill, but not with the feeling of centering either the lawn or the trees or the grill in relation to any one viewpoint. The brick path in a basket weave design at the right of the lawn is narrower than the broad brick path at the left which leads to the corner fireplace, with its copper hood and built-in serving table. Note that the fireplace is in a corner made possible by extending a wall out from the rear of the patio at right angles to it, so that this corner for entertaining has a feeling of semi-seclusion. You do not see everything at once from any place in the patio.

You might consider the structural work of the fireplace and built-in serving table a focal point, but the large oak tree in the lawn has equal claim from another point of view. There is great variety in the forms and heights of the trees, and they are placed with an understanding of their value to balance the composition so no one part of the garden pulls your attention away from the rest. The large oak tree in the grass at the right, for instance, with the path running next it, balances the smaller pear tree in the lower left of the raised beds, with the wider path that runs beside it. All around the walls are planted shrubs of many kinds, both deciduous and evergreen, also a Japanese flowering cherry tree and a Japanese apricot so that in winter or in summer the outlines of their shapes, the color of their twigs, berries and flowers, have interest. The walls, paths and borders coped with brick have the structural lines needed to hold the design together, regardless of the season.

WORK FOR PRIVACY AND ACCESSIBILITY IN THE BACKYARD. If you admire this or any similar outdoor garden room, remember that the first step toward it is in planning your street entrance and service entrance so that you have the possibility of such a private outdoor area. This we have discussed in Chapter III. Then remember that you need a direct garden entrance into the yard from your interior living rooms, so that you do not have to reach it by some devious route. Mr. Williams's patio has special charm because it can be enjoyed from the shady loggia on the same level, seen in the foreground of



94. Sketch by the landscape architect, Edward A. Williams, of a patio garden for Carlton E. Byrne in San Francisco, California.

his sketch on page 121, and from the interior rooms that open off it. Note also that the privacy of this patio has been well established by the enclosures.

WORK FOR DISTINCTION IN PATHS, PAVINGS AND ENCLOSURES. Paths are a structural necessity for getting from place to place, pavings take the wear and tear of outdoor living areas, while enclosures are our guarantee of privacy and build up the three-dimensional quality of all exterior rooms.

PATHS AND PAVINGS. There is usually a definite advantage to be gained by a wise choice in paths alone. For example, the entrance path to the house shown on page 265 is designed of bricks laid in what is called the flat cross design, to increase the apparent breadth of the path and offset the verticals of the house. It makes a more gracious element of the path than a design in the opposite direction would have done.

The Washington back-yard garden shown on page 110 has paths of pea gravel to offset the planting and lighten the effect. The London garden pictured on page 108 makes use of rectangular stones of random sizes of a salmon color for the wide paths, to add color at all seasons to this city back-yard, and repeat the color scheme of the flower beds. The swimming pool of a Florida patio, shown on page 220, is greatly enriched by the cement slabs in a Greek fret design, which serve as the path around it, set off against the grass in between. Tanbark or pine needles make dry, resilient paths through groves and any natural planting.

Black slate was chosen for the flooring of the Washington terrace shown on page 38, in large squares set diagonally. Tiles of terra cotta color distinguish the dining porch shown on page 55. Where children are to use walks or terraces for riding their bicycles or for roller skating, it is important to have the surface level. Note the cement paving designed with a honeycomb pattern for this practical purpose as well as for the significance of the design, as shown on page 171 and explained on page 172. The North Carolina terrace shown on page 339 consists of irregular native stones fitted fairly close together, with grass in the crevices and millstones for interest.

Where chairs are to be moved in and out around a dining table, avoid wide crevices between stones. Note the Florida patio on page 10. But where a mossy plant, such as *arenaria caespitosa*, can be established between the joints of an informal terrace, as shown on page 295, it would be a pity to use cement. For the conservatory paving of the house shown on page 64, William Lescaze makes use of light mortar between the joints of the blue flagstone as part of the pattern, and carries the paving out into the adjoining terrace. Black mortar sets off the squares of concrete in the photograph on page 296.

Pebbles are an advantage as a flooring in any place where plants are to

be watered. See the lath house photograph on page 245. White pebbles outlined in ivy as a ground cover make the unusual flooring design of the London back-yard already shown on page 106.

Often combinations of various kinds of surfaces are introduced for a definite purpose. Bluestone has been laid in the part of a gravel drive near the entrance door shown on page 88 to accent the importance of the door. To feature a raised central pool in a rectangular garden court (see page 292), the landscape architect has used a row of firebricks laid diagonally from each corner of the pool and as borders, in contrast to the ordinary red brick of the field. The playcourt in Rye, N. Y., shown on page 192, combines cement for the center area with flagstone for the surrounding lounging area, set off by rows of bricks between as a border which accentuate the pleasing curves of the corners.

ENCLOSURES OF NATURAL MATERIAL. Many lists are available of hedge or screening material suited to different situations and climates. Hemlocks and pines make a wall of living green around the New Hampshire garden shown on page 301. Combinations of trees chosen for their beautiful contrasts can be selected to screen out a busy street. (See the picture on page 270.) For a dense roadside hedge, Carolina hemlock is used in the planting design shown on page 283. Low box hedges border many gardens. (See the rose garden on page 155.) Take special care to get the utmost possible benefit from such natural enclosures as will serve your needs.

WALLS AND FENCES. Walls and fences offer an infinite variety of choice for the boundary enclosures. A rubblestone wall is shown on page 105. Brick with a perforated design gained by leaving out bricks adds interest to the Washington back-yard on page 110. A ready-made fencing of chestnut saplings in close formation shuts off views of neighboring yards, as shown on page 110. A combination of batten boards used vertically, with latticework along the top for air to come through, is shown in a New York City back-yard on page 103.

The problem of the service yard is solved by interesting cement walls in the back-yard shown on page 118. For fencing which allows air to penetrate, the oldtime latticework on which vines clamber is well-chosen to separate the two loggias of the patio shown on page 22. An ingenious fencing, admirable for semi-privacy where air must not be entirely shut out, is the louvered wall of a sun-bathing retreat pictured on page 193, and discussed on page 194.

Simply as a decorative guard fencing, nothing can surpass wrought iron. Particularly fine examples appear on pages 208 and 319. A simple variation of a post and rail fence has been designed as the guard at each side of an entrance walk where it crosses a little brook. (See page 54.)

The boundary wall of the Brookline house discussed on page 92 was planned with care to harmonize with the house. A high stone wall along the street secludes the front yard of the modern house in Cambridge, shown on page 134. A fence of horizontal boarding is used to achieve distinction for the Regency house on page 261. The whole story of the riverside property on pages 146 and 147 illustrates the modern use of enclosures, both manmade and natural, for the three-dimensional treatment of outdoor areas.

ORGANIZING HOUSE AND GROUNDS TOGETHER

I SUPPOSE WE all approach the problems of organizing the house and grounds the wrong way about. To many people it is a new idea to work them out *together*. We call in the architect, we plan and build the house, and after that is done we consult the landscape architect, not realizing, to quote Ellen Shipman, one of our most distinguished landscape architects, that "home owners lose at least fifty per cent of the possibilities of their grounds by not consulting both professional designers in the beginning, at no more total cost."

WHY BOTHER ABOUT THE GROUNDS AT THE BEGINNING? Once your house is built, you cannot change the location of it. That is the first reason for consulting the landscape architect or planning, yourself, your outdoor layout at the time you decide on the house site. From an architect's point of view, the location of the house does not always include the advantages that might accrue from placing it in the best relation to an ideally located garden, or to trees that might make a great difference in the outlook from inside, or to sunshine or prevailing breezes, or to views or outlooks that are not obvious and may need to be developed to show what they can be. The old saying that two heads are better than one is never more to the point than when you are deciding such an important matter as the exact site for your house.

At a consultation of both the house and landscape architects, you would want all the points that concern the future layout brought up and discussed without rancor. You should ask *both* to express opinions as to where the garage and garage entrance into the house should be; where the service wing and service yard and entrance would work out best from the landscaping point of view and the interior disposition of living space; where the best use could be made of a porch or terrace or patio; how to lay out the drive; what existing trees should be preserved during the course of the building; where and how to open up a living room to certain desirable views by, say, one large window instead of two separated ordinary windows; floor levels in relation to outside terrace or garden levels; the location of outside doors; where retaining walls are necessary and how to relate them to the ultimate landscape plan.

Another consideration is how to work out grading in relation to the landscaping, the existing contours, and the house. It is advisable, also, to know in advance what kind of enclosure is best for parts or all of the property. If the architect resents a round-table discussion on all these matters, the only

justification should be that he himself is experienced and competent in the landscape field of design. Usually he is sufficiently engrossed with his own special field to welcome the point of view of the other specialist. If the two are sympathetic, you, as the arbiter when the opinions diverge, have the advantage of being able to weigh the pros and cons at the beginning and not regret afterward that certain points were not brought to your attention. The house and grounds should be worked out as a single organism, if you want to obtain the full value of your property both for use and beauty. The Chinese word for home means garden-home. Our concept needs to be broadened, so that home does not begin at the doorsill but at the very gateway from the road.

THE SYNTHETIC VERSUS THE ORGANIC HOME. Professional designers have been trained to work out plans as organic entities. To the average person that is a new idea. We have no clear understanding of what it means. What we do, which is natural considering our lack of training, is to select pictures of a door we like or a porch we like or a roof-line or a bay window we have admired. Then we think of all the lovely flowers that grew in our grandmother's gardens, and the kind of tree we used to climb as a youngster, and we take all these ideas to our architect and landscape designer, and we say, "Here; this is what I like. You put them together. Oh yes, I forgot: I want lots of closet space and a cellar with laundry tubs, and a furnace in it. And please squeeze in a workshop and darkroom down there and a playroom for the children. It needn't be a large cellar. My uncle owns a slate quarry, so we can have all the slate we want for the terraces, and my neighbor has a lot of Australian pines to give away, so the landscaping won't cost much."

Is it any wonder that this synthesis of unrelated items results in a synthetic house? The wonder is we have as many honest-to-goodness, unadulterated, non-fake houses as we have, thanks to our architects. We really want a home that pulls together as a living organism, providing for our growth, adapted to the seasonal changes—a home that functions smoothly and with economy of circulation, that provides for the assimilation of food and the disposal of waste, for human enjoyment, recreational activities, privacy, social gatherings for young and old, and the need for rest. We really want a place that is livable, an expression of living forces. Not an exhibit of architectural and horticultural details with a superficial prettiness, restrictive and inhuman because it crowds our lives into its pattern.

To achieve such a result we need to ask, first, "What will it *be* like?," where we used to ask, "What will it *look* like?" We need all the imagination, the adroitness and sensitivity of ourselves and the designers, in the attempt to create a dynamic organism. If we succeed, it will have an inherent beauty which no rules or applied decoration can take the place of. In the mechan-

ical world, the airplane is such an organism, with a beauty of its own. In the animal world you have only to watch a cat to understand what this means.

TREES ARE SYMBOLS. Trees are symbols of what we would like the whole organism to be. They have a characteristic shape and mass that is more than a flat silhouette. "Trees," as a great artist has said, "have backs. Birds can fly through them." And, we might add, birds can nest in the branches. The wind can pass through trees and make music. Sunshine can light up the many leaves and twigs, presenting so many different facets to reflect its beams. Shadows can play on the ground beneath it, which itself has contours. People can walk under trees and around them and climb up into them. People can enjoy the buffer trees make against sound and wind, the shelter they provide from storms, the changing, living color they so bountifully supply, the fruits they produce, the coolness and moisture they add to the air through their system of conditioning the atmosphere.

To create a home that inside and out, around and about, is as useful to man as an oak, and as beautiful through its own structural growth, we must first get a vital conception of what we want, the acorn of an idea so expressive of our greatest needs and our understanding of what will accord with our characteristics and our special lay of land, that the composition can emerge from inside out, not from outside in, and details follow rather than dictate the form of the whole.

WE CANNOT IMPOSE SOMEONE ELSE'S DESIGN ON OUR SITE. Even when we bring to the architect and landscaper a design that is an organic whole which looked right where we saw it carried out, it is probably not the best one for us. We cannot successfully impose on our special piece of property a plan that originated in answer to a problem of some other site or some other climate or some other way of living. Each home should be an original work of art. It should represent us, in our situation, and in our day and age.

LIST THE SPECIAL DIFFICULTIES. If our home is to represent us in our day and age, we are free, if we choose, to take advantage of all the scientific and technical advances that eliminate the difficulties our forefathers faced. We are free, if we choose, to express modern trends and conditions of living which present their own difficulties to be solved in new ways. We do not, for instance, need to build our houses around a central chimney in order to keep warm. We do not need cellars in order to have a place for a heating unit. Many kinds of heating units today will function perfectly without being under the house. The first furnaces of the twentieth century would not.

The economic conditions that made many styles of houses and gardens in past centuries practicable, have changed. We have not, most of us, a gardening squad to keep up extensive lawns and grounds. The historic situation today is different. After the American Revolution, the people's pride in their

new Republic fitted into the wave of interest in Roman and Greek classic styles. The pillars the creative builders incorporated with such spirit into the homes of the early nineteenth century made them temples to the great principles of liberty, stability and order the victorious founding fathers had fought to establish in our government. What we are seeking to incorporate into our homes are freedom from drudgery, a new order of comfort, efficiency and openness to the outdoor life, made possible by twentieth-century progress.

It has often happened that a creative style of house arose out of difficulties that had to be met in a given period and locality. Let us list our special difficulties and perhaps by working them out achieve the individuality we want and do not know how to get. As Royal Barry Wills has said, "All good architecture has been local. The Home of Tomorrow then cannot be the same in all parts of the country."

All right, we will see that ours is our own, not a copy, not a synthesis of details, not the solution of some other home-builder's special difficulties, but an answer to some vital ideas we want put into shape by those we can trust to apply sound principles of design and construction to the task.

WHAT THE DESIGNERS NEED TO KNOW. If you are in sympathy with any or all of the points discussed in the Foreword, your architect should know it. There is all the difference in the world between the house that is extraverted, outdoor-minded, built with an outgoing, expanding idea that unites it with the grounds, and the house that is introverted, boxed-in, high-perched, small-windowed, and built in such a way as to restrict and narrow one's living to the inside dimensions of it, making even a terrace next it seem a ridiculous afterthought. The architect and landscape designer need to know your fundamental point of view on this matter. If you are a reactionary, a conservative by nature, you may still want many modern conceptions of living expressed through traditional forms.

The designers need to know, not only what your spatial needs are, both inside and outside the house, and how much you can spend to carry them out in the beginning and over a period of time. They need to know also your hobbies and how you want them incorporated in the house and your preferences for the patio idea or the porch and terrace idea in your general scheme of organization. What is your pet aversion in homes you have seen? How important is the use of the outdoor surroundings to you? Are you sensitive to color, texture of materials? Are you a sun worshiper, wanting sunshine in your outdoor and indoor rooms, or must you have shade? Is it peace and rest you are after in your treatment of the house and grounds, or do you like movement, lively colors and lots of action in your surroundings? Do you want to have any secluded sections of the garden or inside the

house, what we might call dead-end rooms, or do you like everything opening up and traffic possible in many directions? Do you enjoy waking up in a room open to the morning sunshine? See to it, then, that your bedroom faces east.

What is your chief fear? Is it of fire, or germs, or dampness, or drafts, or fingerprints, or a gloomy breakfast room, or mosquitoes, or burglars, or dogs tearing up the flowerbeds? This may sound silly, but such psychological facts about you are extremely important to anyone trying to create the right place for you to enjoy living in. You must have no fears that are not overcome as well as can be in your home.

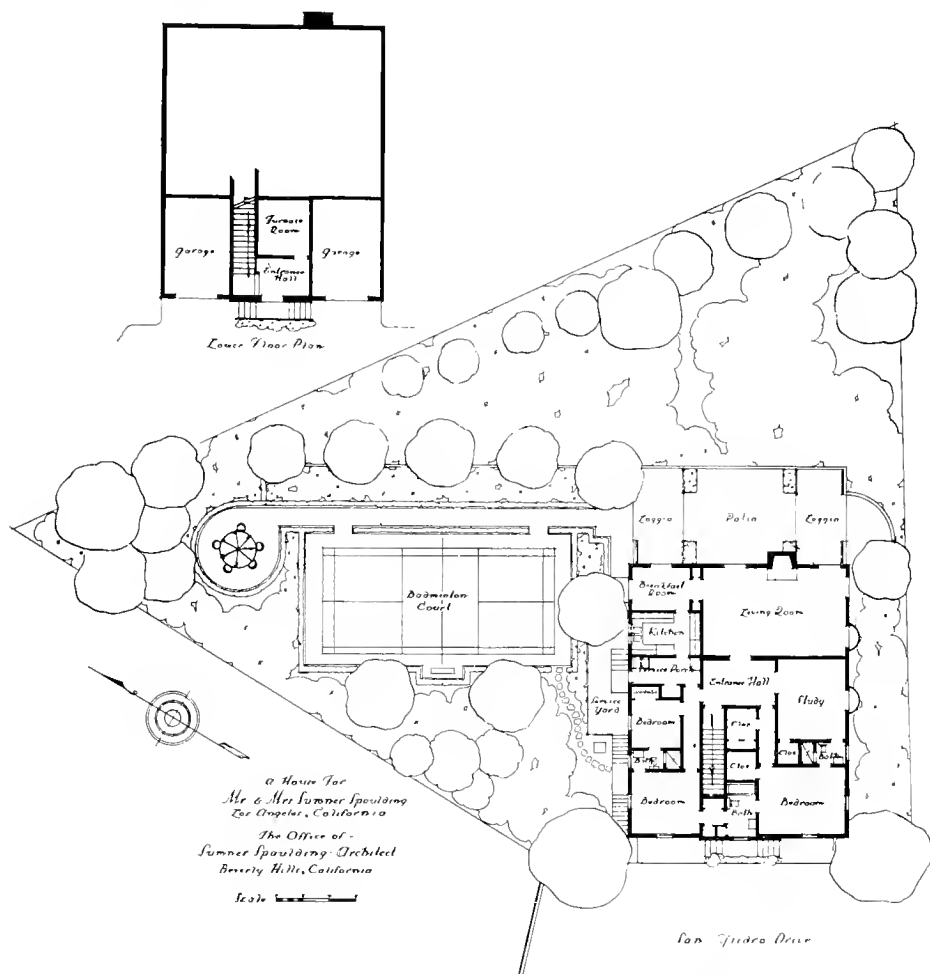
HOW TO GET THE MOST OUT OF YOUR DESIGNERS. A doctor can find out a great deal about a patient by various examinations, but a designer has no machines to register the various mental kinks in your makeup that he needs to know. He is not a magician, although he may have learned to be a pretty good mind reader. By all means co-operate and let him know what *you* are like, as well as what you think the house and grounds should be like. The process may reveal to you how absurd and relatively unimportant some of your mental kinks are in the light of what could be done if you can rid yourself of them. At any rate, do not let fixed ideas of yours close your mind and tie his hands before he has a chance to see possibilities for your enjoyment in the situation that you have never imagined. That is his business. While your designers need frankness from you, they cannot do their best for you if you are too dogmatic. There are many ways of designing as simple a necessity as a drive between two points. When you go to a doctor to be made whole again, you let him work out the prescription. If you as a client insist on preconceived ideas in designing your home, you may discover too late that you have ruled out what was for your own good. The landscape and house architects are usually trying desperately to please you.

Bear in mind when you strike snags, that there are no rules you may not be justified in breaking, provided you and the designer know how to do it well. So be open minded. Try to distinguish, when you have to compromise, between what is essential to the joy of living in your home, and what is incidental or illogical or inconsistent with it. Stick to your main objectives.

AN ARCHITECT'S OWN STORY. The architect, Sumner Spaulding, and his wife, had several leading ideas to follow in the home Mr. Spaulding recently built, the patio of which is described in Chapter I.

"We started," as he explains in *California Arts and Architecture*, "with a good idea of what we did not want. For example, the so-called dream house, with white-washed brick, steep roof and dormers, cast-iron grape balconies, and roses climbing around the door. In other words, the cute, cozy, comfy house, with a picket fence around the front lawn never appealed to us. Some

of the things we did want were more paradoxical. Mrs. Spaulding has always insisted on a one-story house. I have always wanted a level lot on a hillside with some view." Both wanted an outdoor living room, which is described on page 23 in a previous chapter. But before they could get to an outdoor room, they had to adapt their other ideas to the property they selected. It was on a hillside in Beverly Hills, California, but it was not a level lot. That was the first discouraging factor.



95. Plan of the residence of the architect, Sumner Spaulding, in Beverly Hills, California.

THE SITE FOR THE HOUSE. The place to locate the house was determined after Mrs. Spaulding had agreed she did not mind having steps to climb to get into the house, so long as all the rooms were on one floor. There were

rattlesnakes on the hillside, so it was not sensible to locate the house very far up against the hill. In the plan they finally arrived at (see page 130), they established the level of the house eighteen feet above the street curb.

"At this level," Mr. Spaulding says, "we created a terrace on the hill thirty or more feet wide. By placing the house with one end on the edge of this terrace and the other over the curb, we made a garden in the rear and eliminated a lawn in front. Now by placing the bedrooms in the front portion, which was eighteen feet over the curb, they became second floor bedrooms, and with some excavating underneath, we had an ideal place for the garages. By putting the staircase between the garages and leading directly to the center of the house, we avoided both rain and rattlesnakes."



Photo by Fred R. Dapprich.

96. Façade of the home of Sumner Spaulding, the architect, in Beverly Hills, California.

I am especially interested in this arrangement for two garages, one each side of a front door and separated by the enclosed staircase, as it is one way of bringing the car into the house. (See floor plans, page 130.) The front door, as shown above, is simple but striking in its classic dignity, and the steps to it well-designed. The façade satisfies the Spauldings' desire to avoid the pretty sentimental cottage style in a way that is original, logical and impersonal. Some friend in jest said if they pasted the word "adviso" over the door, the house might be mistaken for the prefecture of

police in a small Italian town. That convinced the Spauldings they had exactly the kind of house they wanted!

THE INTERIOR PLAN. As for the plan inside, by placing the bedrooms in front over the street, Mr. Spaulding says, "the living room was automatically in the rear, exactly the arrangement we had originally desired. You will note that none of the rooms take direct advantage of the view. I explain that by saying that a view that smacks you in the face is not as subtle as one that is more casual. (That's what I tell my clients when I can't make a plan work.)" But in the patio, however, there are beautiful vistas up and down the canyon to be seen when the eight-foot doors of the loggias at each end of it are open. (See photograph, page 22.)

THE EXTERIOR PLAN. Besides this outdoor room, already described in Chapter I, Mr. Spaulding put in a badminton court to the left of the house with flood lights to make it usable at night as one of the interests that he wanted his grounds to serve. There is a path along one side to a circular tea terrace shaded by trees. This left only a strip along the wall large enough for cutting flowers. "The badminton court and this planting space are surrounded by a low hedge which will eventually give definite form to the garden even in winter."

The rest of the almost triangular piece of property is planted with trees and shrubs that require little care. "Above the house there is yellow acacia, yellow jasmine and yellow mesembryanthemum where the bank is steep. Yellow evergreen roses which have a single blossom like the wild rose, are being trained over the roof of the loggia. They bloom the year round and are fragrant. Inside the patio is the starry jasmine which is also fragrant and is to be trained up the lattice."

STICK TO ESSENTIALS. In organizing their exterior areas for use and not for ornamental display, the Spauldings were not sidetracked by extraneous ideas. The one decoration on their patio wall has significance and is appropriate. (See page 23.) It developed after the high boundary was established as a necessity for the patio. The planting is not hit or miss but is selected and located for good reasons. Space was provided at the start for the games the family wanted to play, and for the tea terrace with tables and chairs in the shade of trees.

We should plan our areas so we can spend time out-of-doors, with spaces for special interests, with paths, planting, pools if we want them, retreats, walls, fences, gates and arbors as the organic essentials. Well-designed and well-placed, they give our grounds character.

FACTORS IN LOCATING THE HOUSE. It would be absurd to say that all houses should be near the street or all set back from the street. The choice depends

so much on the size and shape of the property, the topography, local restrictions, the most enjoyable exposure for living spaces inside and outside, and the way the greatest privacy for living can be attained and at the same time allow for an entrance to both main and service quarters, convenient for incoming automobiles and accessible to a garage.

THE FRONT YARD AS AN OUTDOOR LIVING ROOM. I have two examples to show you of houses set back from the street because in each case it was not feasible to have garden space behind the house. The front yard is treated as an unroofed area, not built up into a high terrace or sunken to a lower level. By means of enclosures and planting it is treated as an extra room, seen from the house and accessible to it.

The first home in which the so-called front yard has been incorporated into the entire composition, is the residence of Mr. and Mrs. Alfred C. Koch in Cambridge, Massachusetts, designed by Carl Koch in association with Edward D. Stone. Here the house is located almost at the rear of a corner lot, because any space left at the back would be subject to the shadow and close proximity of any house built around the corner, although no such house exists at present, whereas the front yard toward the street has a permanently free outlook.

THE STORY OF A MODERN HOUSE IN CAMBRIDGE, MASSACHUSETTS. The story starts with the owners' point of view, their wants and the kind of property they selected, as described by the architect, Mr. Koch. "This house was designed for clients who were giving up a spacious old-fashioned home in another city and wanted a new one with all the space, none of the inconvenience and little of the expense of the old, almost as much of a poser as faced the architect who was asked to design a New England Colonial house with small windows outside and large ones inside. The principal problem in the design of the house was getting everything desired by the clients onto the sized lot they had chosen, a 50' x 90' corner lot. The clients were a retired banker, his literary wife and his grown daughter. They required three bedrooms and guest room, two baths, one maid's room with bath, library, large living-dining room, lavatory, kitchen, two hobby rooms, one for photography and the other for block printing on fabrics, and a one-car garage." As the architect so aptly sums up the story, "the struggle against space limitations is the theme of the house!"

ACHIEVING SPACIOUSNESS. Mrs. Koch testified to the victorious outcome of the struggle by saying, the moment I stepped inside the remarkably spacious living room, that although the lot was only 50' x 90', what they got out of that lot was actually fifty feet by ninety feet of living. This could never have been achieved by building the conventional New England box-

style house, such as Cambridge is famous for, centered conventionally on the property, with a low hedge around the property. It could never have been achieved without the six-foot high stone wall across the front of the property, high enough so that pedestrians cannot look into the yard, and well related to the adjoining houses and landscape because made of old native bluestone rescued from former foundation walls on the place. It could never have been achieved without having the main entrance separated from the yard by the wall, assuring privacy in what is virtually a patio. (See photograph below.)



Photo by Stoller, courtesy Pittsburgh Plate Glass Co.

97. Entrance of the Alfred C. Koch home in Cambridge, Massachusetts. Associated architects, Edward D. Stone and Carl Koch.

You could not see the enclosed yard as an extra room of the house (see the photograph, page 61), greatly enlarging the space inside, and you could not from the covered terrace feel the house as an extension of the yard, if it were not for three important structural details. One is the continuation of the interior ceiling on the same plane and of the same color as the overhang of the covered terrace, the overhang along the side path and out from the living room to the garage (see page 135). The second is the fact that the interior floor and exterior terrace paving and walk are

on the same plane. The resulting effect is to cause the interiors and exterior to lose definite boundary lines. They seem to be unlimited spaces. The illusion is also due to the twelve-foot panels of fixed glass extending the full height from ceiling to floor level, in the foyer, and from the ceiling to the low bookledge in the living-dining room. If it were not for the plants growing in a bed sunk into the paving of the foyer inside the glass, people would be inclined to walk through it. All interior spaces designed as we have outlined here take on, naturally, a real sense of space well beyond their actual dimensions.



Photo by Stoller, courtesy Pittsburgh Plate Glass Co.

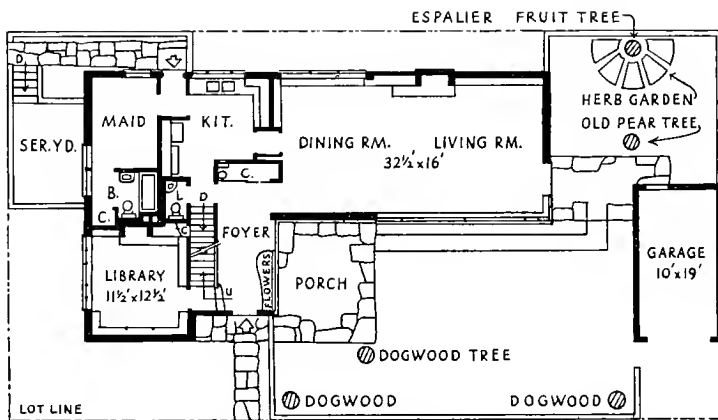
98. Looking across the yard to the living room from the foyer in the Alfred C. Koch home in Cambridge, Massachusetts.

WALLS OF GLASS ARE WORTH THE HEAT LOSS IN NEW ENGLAND CLIMATES. Whole walls of glass are a departure from the well-known New England Colonial traditions. Many people are of the opinion that such an expanse of glass is impractical for a New England house, making it cold and expensive to heat, as well as expensive to install. As a matter of fact, large fixed glass areas are not very expensive to install, since the price of the wall area for which the glass is substituted must be subtracted from their cost. While the heating loss through glass is three or four times greater than through a well-insulated wall, there is no infiltration loss in fixed glass areas as compared with the usual unweatherstripped window, where infiltration accounts for most heat losses. Duct work in a modern house must

be carefully planned to counteract heat loss at the window and prevent condensation by circulation at this point. While there is no disputing the fact that there is heat loss through very large windows, it can be compensated for by having a house well-insulated and equipped with an efficient heating plant. Then the house is reasonably economical to heat, even with large windows. The extra price you pay for fuel, perhaps fifteen dollars more per year, due to two such window panels as these in the Koch house would be, to most people, cheap for the pleasure they afford.

I was impressed by the very low yearly cost of fuel oil required to heat this modern house comfortably. It is very much less than most people pay for heating the traditional Colonial house that is not well insulated and heated by a modern efficient system. The plant here is a hot air furnace, which circulates humidified, filtered hot air through the house in winter and the cool basement air in summer. The expensive part of air conditioning is the air cooling and de-humidification necessary, if the air has to be treated in summer. Here that cost is obviated. The ducts and registers which circulate the warmed, humidified air in winter and the cool basement air in summer in this house are usually cheaper to install than the pipes and concealed radiators needed for a well-designed hot water or steam system.

THE OWNERS' OBJECTIVES. It was the owners' chief objective (aside from the number of rooms specified as necessary) to have the living room floor on a level with the ground outside, and to have a wall of windows low enough to make anyone inside feel close to the garden beyond. The house really grew from that idea.

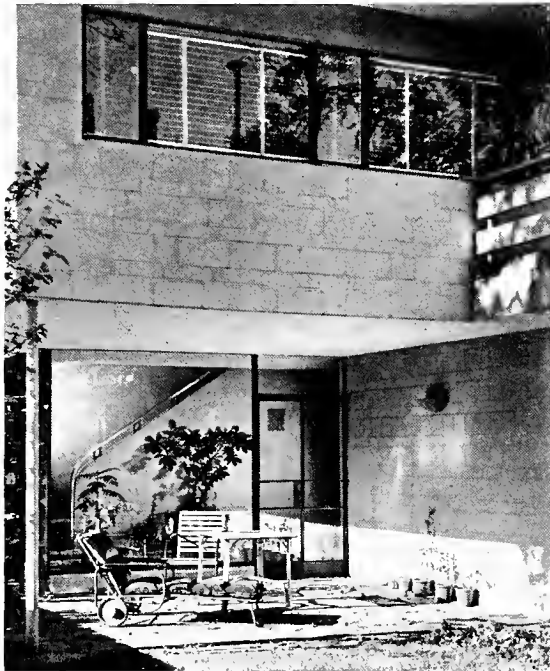


99. The first floor and plot plan by Carl Koch and Edward D. Stone, associated architects for the Alfred C. Koch house in Cambridge, Massachusetts.

THE HOUSE PLAN. The plan took the form of an L (see the plan above), with the library and maid's room at the north along the side street.

The library is entirely private for anyone to work in, since it can be reached only from the hall. The requisite number of family bedrooms, baths and even a sun-deck, are all provided for in the second story. There is no cellar under the living-dining wing of the house, which rests on a foundation of reinforced concrete. There is a cellar under the foyer, north wing and kitchen area, as marvelous as a magician's silk hat for all its contains—first, a hobby room with fireplace and laundry tubs, well lighted at the north, and secondly, off the hall a storage closet, and thirdly, a dark room for Mr. Koch to engage in his hobby. “The basement floor finish is only six inches above the high water level of the district,” the architect explains, “so that drainage was a problem. The floor, four inches of reinforced waterproof concrete, was laid on heavy waterproof paper over four inches of gravel. So far this expedient has been successful.”

The architect was able to work out his flexible, livable plan by using modern building construction. His material is a patented, specially waterproofed cinder concrete block, laid in alternate four and eight inch courses, which has as much interest in texture as brick or stone. (See photograph of terrace below.) It is painted a warm, almost pinky tan, so it is not forbidding in color.



Courtesy of Pittsburgh Plate Glass Co.

100. View of the terrace and foyer of the Alfred C. Koch house in Cambridge, Massachusetts. Associated architects, Karl Koch and Edward D. Stone.

FLAT ROOFS AND OVERHANGS. The roof is flat. The horizontal lines are repeated in a series of overhangs that would not be appropriate on a house of traditional style, but they are organically right here, because they have a purpose. Thus, the ceiling of the entrance foyer continues outside for fifteen feet to form the ceiling over a paved terrace there. (See page 137.) The ceiling of the living room extends out three feet along the west side to cut off the glare of afternoon sun all summer, but does not affect the winter sunshine because the sun is then low enough in the sky to penetrate under the overhang. It also provides shelter from rain to anyone walking on the path just outside the living room to the garage at the southwest corner of the yard.

THE GARAGE. This garage is hidden behind the six-foot south wall of cinder blocks, like the house. It was possible to have the roof of the garage on a line with the top of the wall, by grading the driveway into the garage down from sidewalk level. Between the garage wall and the south side of the living room, an overhang from the house twelve feet wide provides shelter for anyone coming directly in this way from the garage, as there is a south door from the living room under this overhang. The whole south wall of the yard seems to form part of the south wall of the living room because of this extension of the overhang. It all means just another organically sound way of integrating the interior and exterior spaces of a single unit we call the home. Note the interesting square lattice-work of concrete above and around the garage, which supports vines and affords shelf space for pots. A wistaria next the garage has reached the sun-deck above the overhang, which is nature's way, when given the chance, of uniting levels and relating outdoor spaces.

THE SERVICE YARD. While most people would be puzzled at the thought of getting on a lot only fifty feet deep by ninety feet wide a house of this size, a garage, and what seems a spacious front yard, they would be completely stumped to have to provide also a secluded clothes-yard convenient to a service entrance. That is what Mr. Koch accomplished. The service entrance to the kitchen is from the side street at the north, where the house sits back about six feet from the high boundary wall, and the ground outside the basement windows of the hobby room is four steps below sidewalk level. (See plan, page 136.) Between the house and the boundary wall, the clothes line has been suspended on a level with the top of the wall, so that no one passing can see washing hung to dry on it. The garbage pail is buried just outside the kitchen door.

THE PLANTING. Except for the path outside the living room, connecting with the garage and foyer and living room door, the front yard is mostly

grass out to the high boundary wall along the street. Near the corner of the covered terrace is a young dogwood tree, making a pattern of its branches in the picture, page 61, against the bedroom wall over the terrace. Along the wall of bluestone are two other dogwoods, a Scotch pine, laurel and rhododendrons. Old maple trees along the street outside the wall tower above it. Between the garage and the south living room door, just east of the overhang sheltering this passageway, stands an old pear tree carefully preserved during the process of building. It can be appreciated from the sun-deck over the living room. Against the east wall that carries out from the southeast corner of the house to the southern boundary wall, is an espalier fruit tree, with a fanshaped herb garden at its feet no larger than a table cloth. The five radiating beds that comprise it have strawberries for a border and consist of thyme, germander, southernwood and marjoram.

MUTED COLORS—RESTFUL SPACE—HORIZONTAL LINES—MINIMUM UPKEEP. These little beds, in tones of green, the small scale of all the planting, the fact that only a few specimens have been used and no brilliant colors, as well as the layout, all represent a well thought-out plan. Where few specimens are chosen, more care and expense can be given to the selection of each one, and but little upkeep is required. A few trees for a limited space are equivalent to a grove of trees elsewhere. The only way the owners could achieve the restful, spacious effect they wanted, inside and out, was to restrict the planting and the furnishings to the minimum, scale them down to fit the space, and play up the restful horizontal lines of the house.

THE MEANING OF THE PLAN. Conflicting designs, exciting colors and a restless background for living prove as disconcerting to some people as the curious two-headed animal in Dr. Doolittle's family, known as the Pushme-Pullyou. Here, in this home, Mrs. Koch did not want absence of form or color or interest, but she did want these qualities controlled. She wanted them balanced, not in an obvious way but in a subtle, livable way. That is why the front yard is both simple and casual in design, with an open space to look out on toward the background wall, with a terrace for chairs, planting against the wall, a path where it is most useful, and a border of low-growing plants and spring bulbs to emphasize the importance of the path and at the same time afford interest in a place close to the house, where they can be most enjoyed.

The border consists of daphne, primroses, blue grape hyacinths, dianthus, hardy candytuft, the Christmas rose and lemon thyme. These plants do not cut off the view. By having a variety instead of a row of identical trees, and by spacing them without crowding, the trees and shrubs call attention to themselves individually, and that increases the apparent size of the yard.



Photo by Fred R. Dapprich.

101. The George Cukor residence in West Hollywood, California. Architect, J. E. Dolena; landscape architects, Florence Yoch and Lucile Council.

THE INTERIOR. The appreciation for the subtle beauty inherent in materials and natural forms is reflected inside the house. For instance, the material used for the interior walls is integrally colored stucco, that is to say it is stucco in which the color, ground in powder form has been mixed while the plaster is wet. The architect suggested it because it has "a slightly roughened texture which gives a warmth and depth lacking in a wall with a painted surface." The living room has one such wall of a soft gray-green, and two of a pinky tan.

LIGHTING EFFECTS. The night lighting effects, both inside and outside, are unusual, and because of the large windows can be enjoyed from inside and outside simultaneously. Indirect fixtures behind the flower boxes on top of the garage and at the front entrance light up the overhangs of the house, and thus give new dimensions at night. Inside, the indirect light against the ceiling at the entrance from the hall into the living room adds to the size of each.



Photo by Fred R. Dapprich.

102. Entrance to George Cukor's residence, West Hollywood, California.

THE HOMELIKE ATMOSPHERE. As the architect says, "That the house doesn't seem cold and impersonal is largely due to its texture, the walls, ceilings and soft carpeted floors. The extensive use of Philippine mahogany in a light finish adds to this effect. There is a sparing use of chromium. In its conception this house has not been evangelistic—but an attempt to provide a home." And that is probably why it succeeds in winning converts to the new point of view expressed in it.

A CALIFORNIA VILLA ON A MOUNTAIN SIDE. To pass from the Koch home in Cambridge to the home of George Cukor, the celebrated director of moving pictures, in West Hollywood, California, is to span the continent and find again a house set back from the street. See the photograph on page 140. Seventy-five feet of the mountain had to be cut away to make room for the house and the terraced gardens next it, that lead to a commanding view of the neighboring hillsides, from an arbor—a lay of land singularly like the rocky country around Mount Vesuvius, in Italy, where the villas of Herculaneum and Pompeii were built in the days of Roman elegance.

THE SPIRIT OF A POMPEIAN VILLA IN A MODERN-CLASSIC HOUSE. Designed by the architect J. E. Dolena, this hillside house of a bachelor who could afford to carry out every desire, even unto seven living rooms, suggests in spirit and classic refinement of detail a Greco-Roman country home, but is freely interpreted in the modern American spirit. Witness in this respect the tiers of windows, beautifully proportioned and equipped with Venetian blinds, on the second story, which in this house is the living room floor because of the views to be gained by situating them above the level of the high boundary wall along the street. The space in front of the house is not open to the public. One gains access to it only by ringing a bell at the locked gate in the wall to the left of the picture. A servant then ushers a visitor across the front lawn and courtyard to the graciously designed entrance porch and main door, recessed under the second story. (See photograph, page 141.) The use of the space in front of the house as a hallway, with access through a locked gate, is quite in the spirit of the old Roman villas with their atria as entrance courts. The lower floor is given over to a large recreation room, dressing rooms and servants' quarters. Upstairs are the lounges, library, drawing room, dining room and the master bedroom suite, situated over the entrance porch, bringing to the owner a near view of the swimming pool beyond and the charming out-of-door living room around it.

WHAT WE HAVE IN COMMON WITH THE ROMANS. The area between the street wall and the terraced hillside adjoining one end of the house, which we would, I am sure, pick out as the most modern feature of the place, is really, in treatment, although not in details of design, very close to the Roman gardens of the first and second centuries. See the photograph on page 143. The reason is that modern America is more Roman than the Romans in its urge to enjoy outdoor living. One has to smile when the so-called modern designers snort at the very idea of looking into past traditions, as though these traditions had nothing to tell us about ways of solving modern needs. But Cicero had his bathing pools out-of-doors. The younger Pliny had his pergola and tennis court. The Romans were the first people to make the transition between house and garden in the form of terraces, an idea which they gave to succeeding generations. They had sanded walks up to their favorite lookouts, summer-houses and dining pavilions, many fountains and pools around which to plant water-loving flowers. They had a keen desire to make their out-of-door living areas garden spots as well, perhaps too formalized to suit our taste.

There is precedent, if we go back far enough, for practically every so-called modern idea, and it pays to know when to apply old principles and when to discard details that do or do not make sense for us. For



Photo by Fred R. Dapprich.

103. Terrace and pool at the George Cukor residence,
West Hollywood, California.

instance, the method of training fruit flat against a wall, which is called the espalier method, is just one detail from the vast knowledge and culture the Romans built up which we see creeping into favor here in modern gardens, although it has never ceased to be practiced in Mediterranean countries.

THE INSPIRATION FOR US. In studying the outdoor areas near Mr. Cukor's house, so interesting in themselves and so inter-related by the landscape design that one cannot exhaust the many different aspects they present, we must bear in mind that the owner was not attempting this layout on a limited budget. The theme of his house is abundant hospitality. The story is that his entire six-acre estate and villa started out from his desire to appease a friend who complained that in his former home there was not a single comfortable chair. What interests us is that on a smaller scale, this kind of layout would be possible for the average person without a corps of gardeners.

THE GENERAL PLAN. What you see is a green lawn, with low shrubs and vines near the house, larger trees near the boundary wall. Then your eye is drawn to the swimming pool lined with blue-green tile, in close proximity to the dressing rooms on the lower floor of the house. Beyond you see a large, informally disposed terrace around a beautiful live oak tree, shown in the photograph, page 143, with a seat of weathered timber, cushioned in turquoise blue, encircling it. You see an outdoor fireplace built into the brick wall that insures privacy for this whole room. Chairs and divans, upholstered in blue and yellow, furnish it. Beyond this terrace is another paved lounging terrace at the base of the cliff, shaded by another live oak whose long, horizontal branches show in the foreground of the photograph, page 145. From this level the eye follows up the carefully planned walk, with many platforms on the way from which to enjoy the terraces of bloom and verdure against the natural rock which forms a living wall at this side of the outdoor ascent. Trees border the other side but do not shut off the view over the valley. At the top, the rocky summit has been hewn flat for a broad arbor, again a sitting spot where each detail of the spacing of the columns and the planting around it is a little masterpiece of design.

In many cases no such stupendous and expensive rockwork would be necessary to achieve such a garden walk. On a smaller scale all that you see in the photographs would suit the taste for simplicity and the treatment of outdoor space as a livable room for people. I spent a morning entranced, taking in what the landscape architects, Florence Yoch and Lucile Council, had done to create this composition, and the more I looked the more my admiration grew.



Photo by Fred R. Dapprich.

104. Terraced hillside walk at the George Cukor residence,
landscaped by Florence Yoch and Lucile Council.

THE WHOLE COMPOSITION IS LIVABLE. Just within the scope of the pictures, if you can imagine the hillside garden extended to the left of the arbor until it reaches the house, there are more examples than I can mention of beautiful color combinations in flowers, beautiful contrasts in the varied vines and shrubs and trees as arranged, an unusual treatment of certain vines, such as *vitis rhombifolia* and Carolina jasmine, to drape the jagged stone that forms the walls back of each terraced level, and of espalier shrubs such as *pyracantha* and the glossy leaved magnolia, not often seen trained flat against a wall. The undertaking of the walk and the terracing of the cliff took engineering skill, plus an understanding of the changing dimensions that needed emphasis as you pass from one level to the other.

As in any good landscape design, the principles of rhythm, dynamic groupings, balance, accent and scale have been utilized and pleasing relationships established between divisions of space, such as between the lower terrace and the first retaining wall. The curbing tile (designed like *acanthus* leaves) used to border the flower bed next the lower terrace (see photograph above) is just one detail typical of the many that spell

artistic perfection here. In the bed are iris, daffodils, hyacinths, pinks, snapdragons, Virginia stock and agatheas.

Beautiful as the details are, one is not bogged down by them. They are all chosen for a purpose and subordinated to the general scheme. There is a sweep to the whole, and movement in the paths and changing levels. The open spaces balance the masses of planting. The foundations of the house are not smothered. The planting on the lawn is no woolly job, alive with meaningless bushes. These are some of the reasons why humans are not dwarfed and intimidated by the planting.

AN INTEGRATED PLAN FOR A RIVER ACRE. James C. Rose has taken a plot of land on the Delaware River, and in a model, published in *Pencil Points*, he has laid out a series of roofed and unroofed, enclosed and open areas which are so related, one is hardly conscious of where the house leaves off and the grounds begin. The captions which describe this model explain his purpose thus:

"In developing a waterfront plot of less than one acre for intensive use eight months of the year, the problem was to provide liberal space for all suggested activities with integration of elements, assured through proper orientation of the various rooms with relation to the outdoor planning. Plant and architectural forms were treated organically. The economy of area which distinguishes this plan is apparent when the general layout is studied. Segregated, the same units would require several acres." (See plan, page 147.)

The two-story house, in this case, is flat-roofed, of modern building construction. The drive circles in from one side of the road frontage to the drive-through garage and entrance, and then out the other side of the front lawn. It is bordered by trees of medium height and horizontal branching, with limbs well up from the ground to allow vision underneath. The kitchen, too small perhaps for some families, is along the front of the house with its own service entrance from the drive. The lower floor has a living room with a secluded study on a higher level.

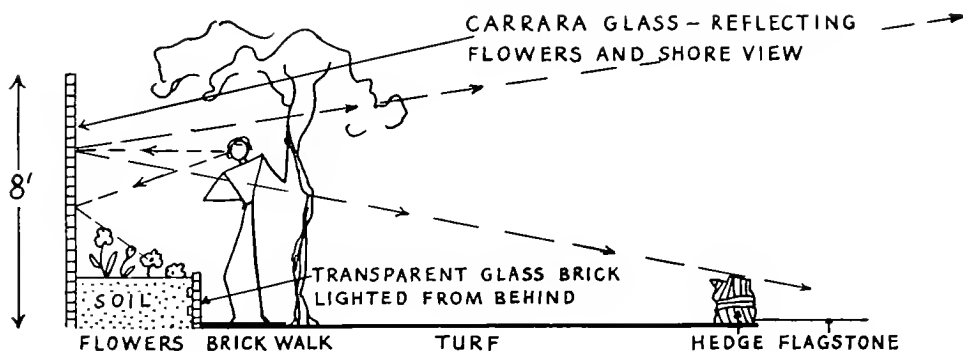
The glass doors at two sides of the living room can be folded back to extend it into the terrace outside. There is a terrace for dining and living across the hall from the living room. The hall itself has an exterior wall of glass and a ramp instead of stairs up to the second floor. Trees shade the large dining and living terrace from morning sun; the house shades it in the afternoon, and also cuts off winds. The view is toward the river, where the glare of the sun on it can be mitigated by pulling the spun glass curtain that runs across the wall.

PLANTING IN THE TERRACE AS A PARTIAL ENCLOSURE. The dining-living terrace has a low hedge of shrubbery functioning as a low wall, a partial screen

in one corner to keep the spaces thus separated more intimate. Such planting is feasible in a paved terrace if the soil is spread out beyond the roots under the gravel base of the terrace, and if there are small pipes for watering and fertilizing the trees or shrubs, set at intervals around the outer margin of the root spread.

A CANTILEVERED ARBOR. There is a cantilevered arbor extending from the long side of the living room over the stone terrace overlooking the lawn and garden. By cantilevering it out from the roof, one has no supporting posts to run into when setting furniture under it. It also illustrates integrated construction. Instead of a roof and an arbor, this accomplishes the same thing with less material, less space and less expense.

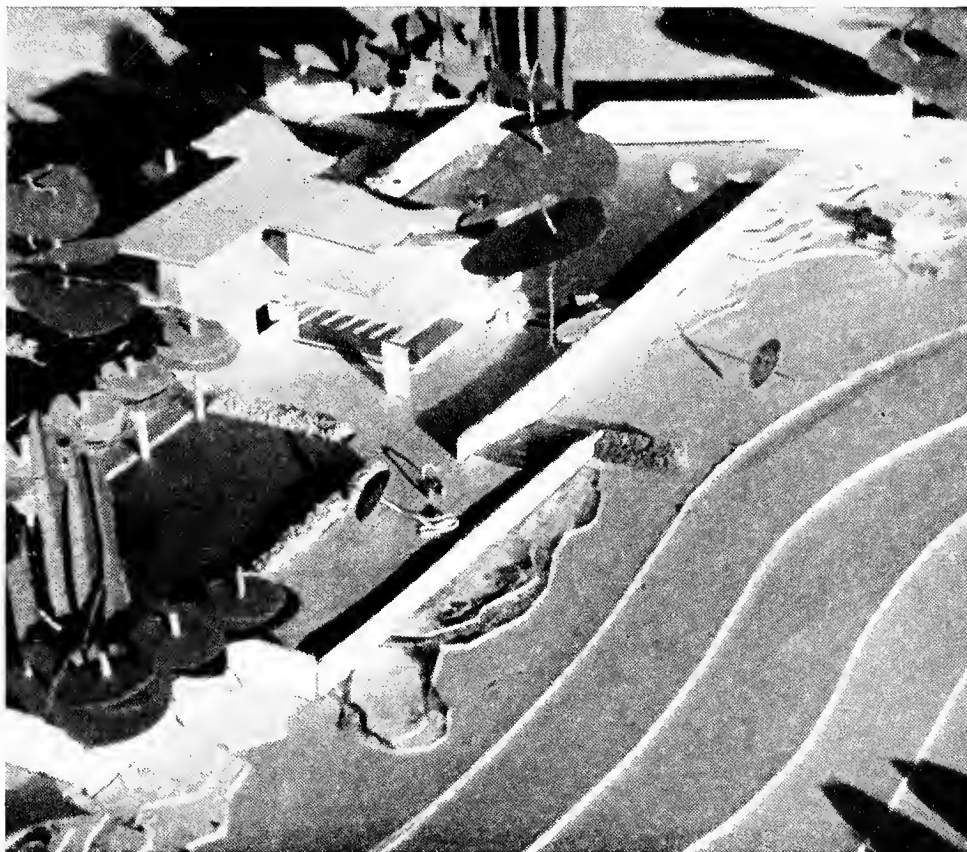
THE TERRACE IS EXTENDED AROUND THE LAWN. The terrace next the house continues around the lawn in the form of a broad sitting area next the river wall, and a narrow path on the secluded side away from the breezes. Trees with horizontal layering of the branches, as dogwood or hawthorn, shade this walk and flowers border the path on the opposite side, backed by an eight-foot wall of black Carrara glass. The flower border is raised so that one does not have to bend over so far in working in it, and the front is bordered by a low wall of glass bricks with night lighting concealed behind to make new dimensions at night of this charming walk. By day the high glass wall behind acts as a boundary, and at the same time its reflective surface has distinct decorative value. (See the sketch below.)



106. Detail of a flower border and walk in a garden designed by the landscape architect, James C. Rose.

In other words, it is an organic part of the design—not just an ornament. At the far end of the lawn, on the raised terrace is another cantilevered arbor against an eight-foot brick wall that provides a windbreak for the terrace. A toolhouse is built into one corner. The wall along the river front is high enough to keep people from walking off, and low enough not to

obscure the view toward the water. Trees are planted outside this low wall at the corner of the arbor, partly to balance the garden bed on the opposite side but organically to give foreground to the view out over the water. The trunks coming up between the eye and the view serve as measuring sticks by which to judge the extent of the view and the size of objects in the distance. They are vertical in form, in opposition to the horizontal forms of the house and the trees along the inside of the lawn. The designer has emphasized horizontal forms both in the house and garden and used verticals for accents.



107. The model of the house and landscape plan designed by James C. Rose for a riverside acre.

Mr. Rose has used specimens rather than masses, but instead of spotting single plants and trees around without meaning, as an amateur is inclined to do, he has organized the arrangement as part of a coherent scheme. This is economical; a few trees cost less than dozens, and the maintenance of few plant materials is a saving. For more details see pages 274 and 275.

BREAKS IN A SET PATTERN. The low hedge on this side only of the lawn balances the one at the house end. Note the irregularities of the turf panel. It is quite different from the exact oblongs of lawn one usually sees treated precisely alike all around with hedges that have to be continuous. These hedges are intended simply as helps to control circulation so you cannot at all points enter the grass panel, also for their effect seen in three dimensions rather than as a flat plan.

WORKING OUT A MODEL HAS ADVANTAGES. The reason why Mr. Rose works out his ideas in models rather than in plans is just to get the three-dimensional effects he wants. He feels that since we seldom enjoy landscaping simply looking down from overhead, but normally as we walk about with our feet on the ground, we should plan our landscaping not as it looks on paper but as it works out best for people to enjoy when in the garden. See his article in *Pencil Points* for April, 1939.

If we worked more with models we would be less bound by the old hackneyed ways of getting balance by exact symmetry which we can see on paper, and we would avoid those single focal points which may look well on a plan but are too insistent on the beholder in the garden.

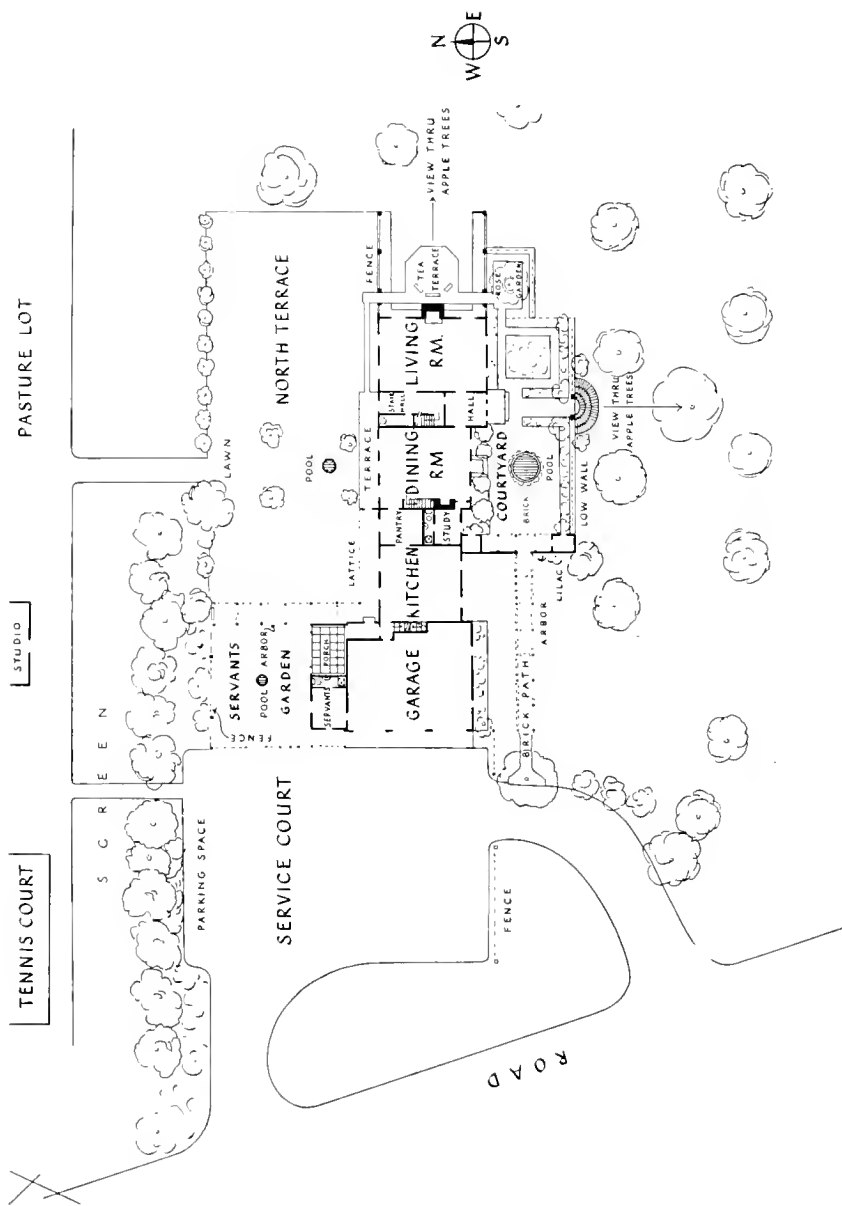
APPRECIATING THE CONTOURS. Mr. Rose is conscious of contours of the land, of which the average person is unaware. The earth is not a flat plane but a rounded substance with hillocks, rises and falls, which add greatly to our interest in a place without our knowing why. So Mr. Rose has indicated the folds and long rhythmic lines of the sand carved by the tides along the beach. His model, shown on page 149, shows also the angular edges of the rock ledges in their natural shelvings at the waterline. His design emphasizes these contours by means of steps from one level to another. As you continue walking around the river side of the terrace, you come to a place to step down to the rocky shore.

SPACE FOR SUNBATHING. Here on the shore is a perfect place for sunbathing. To provide temporary privacy for the areas inside and outside the wall, the design calls for a curtain of spun glass, a new weatherproof material, supported on a rustproof frame above the sea wall here, which can be drawn or pushed back at will. Returning to the upper level, you can descend through a narrow passage hemmed in by bushes and boulders to an area inside the sea wall. The interest in this area centers around some exceptionally graceful oaks and locusts that were already growing near a rocky outcrop, and were carefully preserved during construction work. Eventually you make your way around to steps that lead to the level tiled terrace next the house.

CIRCULATING PATHS REQUIRE NO UPKEEP. It is very subtle the way these circulating paths are managed, to avoid complete freedom of access to one point from another, and at the same time provide efficient direct entrance where this is desirable. Needless to say, once the terraces, paths, grass and planting had been established, there would be very little upkeep attached to Mr. Rose's pleasing design.

MOVING AND RE-ORIENTING A LONG ISLAND FARMHOUSE. Eight years ago, when the architect Edward Shepard Hewitt bought his present country home in Lloyd's Harbor, Long Island, it was a weatherbeaten old farmhouse, sound, of pleasing proportions, rather small, and situated on the highway, with eleven acres of old orchards and meadows stretching away to the north and south of it. It faced west. Mr. Hewitt had the original structure moved back from the road and turned so that the front door faced south. Then he restored it, added the dormer windows upstairs and the new service wing and garage toward the drive at the west end of the house, making the old kitchen into a pleasant dining room, with Dutch doors to the north and south. All this was done so that the main living rooms might get the field and orchard outlook, a southern exposure on the long side of the house, and the peace and quiet that this removal from the highway would afford. The house, as re-oriented, is arranged so that the public space is cut to the minimum needed for the drive and parking space near the garage, and the owners can have much greater privacy than was ever necessary in the horse and buggy days when people were glad to watch what "passing" there was. Study the plan on page 152 and the photograph on page 153 to appreciate the results of the new location and restoration.

OUTDOOR TERRACES THE CHIEF OBJECTIVE. The Hewitt family consists of the parents, their six children of varying ages, and one or two servants. The house is intended for use during the long summer vacations from school, and for week-ends in spring and fall. No matter how large the house, and this is ample, about a hundred feet long and twenty-six feet wide, Mrs. Hewitt says it would seem restricted if she could not make use of the outside. This was her first objective, once the house, with its many delightful features, was in shape, even to a study with a hidden door and a trick stairway. She and Mr. Hewitt have surrounded the house on three sides with four outdoor rooms, which sounds paradoxical but will be understood on consulting the plan, page 152. There you will see the grass lawn to the north for large evening parties, the tea terrace outside the living room to the east and a small rose garden jogging out at the corner between it and the large brick-paved courtyard to the south, where even in February one can sun oneself in the most sheltered corner.



108. Plan for residence of the architect, Edward Shepard Hewitt, at Lloyd's Harbor, Long Island, designed by himself.



Photo by Samuel H. Gottscho.

109. The courtyard façade of the Long Island home of the architect, Edward S. Hewitt.

A SECLUDED COURTYARD. Boundary walls of various kinds make this courtyard secluded and private. See page 7 and above. The main hall and dining room open onto it. From the drive and garage it is approached through an arbor with a rounded top overgrown with white and purple wistaria, and with Emily Gray roses followed by Crimson Rambler. They effectively shut out any view of the garage and kitchen as you come through. Nothing has been added that would destroy the old-time traditional style of the place; consequently you think of it as all of a piece, all the same age. The high brick wall, painted white inside, with an old, faded blue door arched at the top through which one enters the courtyard, is an example of this point. It has a shallow lean-to roof on the side toward the courtyard. A tool closet and dove-cote turret have been built at the outer end where the wall joins the picket fence that goes across the front and opposite end of the terrace. The loggia thus formed is a shady place to sit, and serves also to cut off the view toward the drive, and kill the glare of the afternoon sun from the west, because it is ten feet high. It preserves the roomlike quality of a patio that Mrs. Hewitt wanted in this courtyard. While in structure it is Long Island Colonial, the inspiration for it came from a loggia

in Spain at the home of El Greco, built in an entirely different manner. Only with imagination and a keen creative sense could it have been adapted to its purpose here. The mason had to be encouraged to lay the bricks without a plumb line, and the result is much more primitive than the mechanically perfect wall he would otherwise have put up, sound enough to support a church roof, which was not necessary here.

THE PAVING AND POOL. Mr. Hewitt achieved the effect of old paving, even with new bricks, by having them set in a mixture of sand and cement so that moss will grow in the joints. Mrs. Hewitt takes out bricks as she puts in low-growing plants—mint, thyme, alpine rose, early chrysanthemums—here and there, especially around the central pool where there is always something in bloom. The pool for goldfish and water lilies has a useful part to play besides being decorative. When the jet is turned on in the middle of this pool and in the pool on the north side of the house on hot summer afternoons, there is a definite cooling of the air felt both outside and inside the dining room, which has doors opening through so that one can see both fountains in action.

PLANTING FOR COMPOSITION WITHOUT UPKEEP. The planting in the main terrace and in all the other terraces has been simplified with the idea of keeping maintenance costs low. Mrs. Hewitt does a great deal of the gardening herself and has a gardener's help only one day a week through the summer. The old box planted outside the dining room door and at the gateway in the picket fence, looking out into the orchard, is sheltered and has not suffered setbacks. Many perennials grow in the beds leading to the front door from the picket fence, and many rock plants which self-sow and maintain themselves year after year, come up between the bricks around the pool. The climbing roses and vines over the entrance porch, dining room door and loggia roof are half the story of this delightful open-air room. Dr. Van Fleet is the rose over the entrance porch. Wistaria grows over the dining room door. On the loggia roof are five hardy flowering vines that carry on the bloom from early June to frost. They are Dr. Van Fleet, an American Beauty rose, the Jackmanni clematis, trumpet vine on the corner next the house, and autumn clematis. In addition, there are Heavenly Blue morning glories.

On the plan you can see that the only grass in the entrance courtyard is a square plot to the right of the door. To balance the round pool in the paved section, a round bed of myrtle has been planted like a wreath, showing as a darker band of green against the grass in this plot. In the spring, bulbs come up through the ring and bloom in charming fashion—chionodoxas, grape hyacinths, early tulips and dwarf daffodils. Near the front

door, in the sun, are the true English lavender plants from which Mrs. Hewitt makes her lavender water.

FURNITURE TO STAY OUTDOORS. The furniture in this courtyard, and all the other terraces, is substantial and intended to stay outdoors all summer. So it is made of wood, most of it with open cracks between the boards for rain to run off and prevent rotting. The picture of the table and chairs and octagonal settee, on page 7, illustrates this point.



Photo by Samuel H. Gottscho.

110. The tiny rose garden in the Edward S. Hewitt home,
Lloyd's Harbor, Long Island.

SEPARATE RETREATS HAVE ADVANTAGES. One of Mrs. Hewitt's prescriptions for domestic peace for anyone with a large family, is to provide many places separate from each other where different groups of different ages can gather and not disturb each other. She understands the purpose of the young architects and landscape designers who plan a single vast open space where you ooze from one section to another as boundaries melt away on request. It is to economize on space and make the same area flexible and available for either seclusion or openness at will. But they sometimes fail to realize that when you really want quiet and seclusion, you do not get it inside non-soundproof, partial enclosures that can be whisked aside by anyone in the family who passes by.

So Mrs. Hewitt has her four separate outdoor rooms including what is probably the tiniest rose garden on record around an apple tree. (See

photo, page 155.) Then, for the servants' use, she has a screened dining-porch off the kitchen and a garden outside that, with a picket fence all around it, high enough to hide washing when the clothesline is up, and a grape arbor which continues around to screen the pantry and kitchen from the north terrace. For the sport-minded members of her family and their friends, there is a tennis court out beyond the garage, only two or three hundred feet from the house, hidden behind a natural hedgerow of trees, and entered by a path from the north lawn. (See the plan on page 152.)

THE DEAD-END ROOM AND TEA TERRACE GIVE PRIVACY. When the living room in the old part of the house was being restored, and the terrace outside it was under construction, friends tried in vain to have the Hewitts cut a door between. But Mrs. Hewitt had many rooms with doors to adjoining terraces. She felt the need of one dead-end room inside the house, where people would come if they had reason to but not as an excuse to go through it to reach the outdoors. The living room, therefore, kept its privacy, although it is accessible to both halls. Moreover, the terrace outside it maintained its own privacy, partially through the high walls that keep it hidden until you come upon it from the north or south paths. Because of the cross ventilation from north to south, this east terrace is especially acceptable at tea-time, when breezes elsewhere are lacking, and the fragrance from the long flower borders against the walls makes it doubly attractive.

THE PURPOSE OF GARDEN ROOMS. If we stop labeling gardens as strictly formal or informal and begin to think of them and name them for their usefulness, as the afternoon garden, the breakfast garden, the winter garden, etc. we will come closer to the underlying purpose in creating any garden spot, and that is to have us in it, enjoying from every angle its particular blessing, its little claim to be an Eden for us.

CONSIDER THE CLIMATE IN THE LANDSCAPE PLAN. In planning one's outdoor living areas, each with its special purpose in mind, we cannot do better than to heed what Miss Florence Yoch considers the determining thing in a landscape plan. It is climate. The wise old priests who first started garden spots in California knew that sun and water and climate are the gods of gardens. If you know how to take advantage of their beneficence and avoid their malevolence, you are master of any situation.

In California, as Miss Yoch explained to me, there are four climates going at the same time, one at each side of the house, making four sets of difficulties for the landscape designer to overcome but also making four opportunities to please the owners who can use each exposure for a differ-

ent purpose. The burning sun is as much of a problem in planting as the side that gets no sun, but if well organized and planted, each is useful to the owner who wants to be in full sunshine on chilly days and out of the sun in times of extreme heat. The side that faces south is the easiest to plant and the exposure most useful all year round as an outdoor living area.

How often do we accept the limiting factors of our climate and play up to what suits it in our planting? On walls away from the burning sun, for instance, we can use espalier trees and shrubs which will be fostered by such warmth as the walls receive. In northern climates we should not allow ourselves to be tempted to import tropical vines and trees that will freeze, while in the tropics we should not attempt to have northern vegetation, such as apple trees, that die for lack of winter.

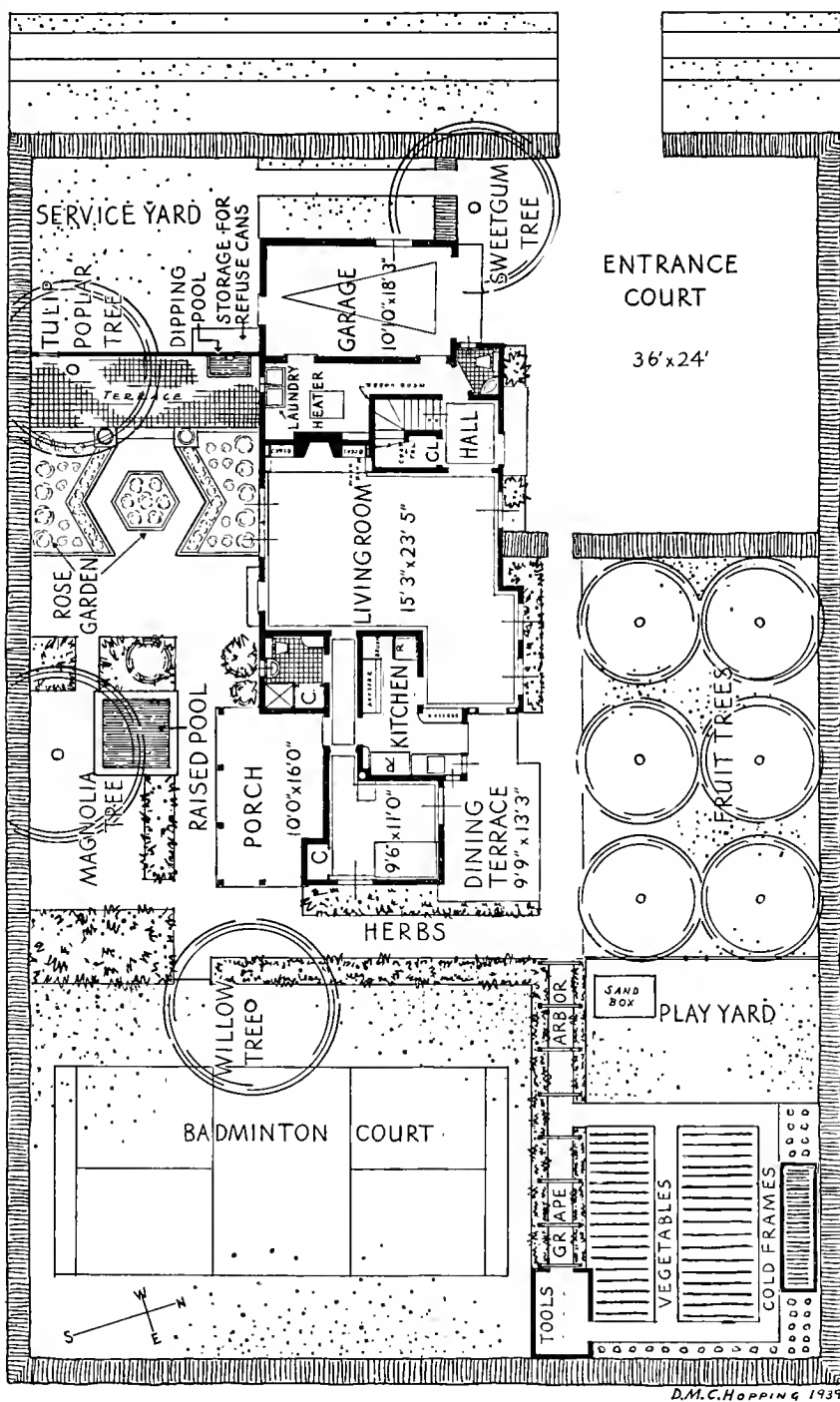
In Miss Yoch's opinion, the landscape designer should not work for a showy effect in the development of the grounds but for the great, satisfying qualities of *permanence, durability, quiet, space, light and shade*. She went abroad one summer just to study what plants and trees have survived after three hundred years in places similar in climate to her field of operations. To the assets Miss Yoch lists as vital to good landscape design, we can add a comprehensive arrangement of spaces and organic material that enables us to live and circulate in it and enjoy all its dimensions as part of, not separate from, our home life.

THE CHILDREN'S PLAY AREAS

WHEN YOU THINK of buying or building a home in the country, the city, the suburb or small town, if you are a parent you naturally look into the school facilities of the neighborhood. If you are alive to the educational value of all those hours taken up by play and sports in a child's life, you also look into the play possibilities of the home surroundings and of the community. Naturally, you want to provide for as much play area as possible at home, and will keep in mind the changing needs of your children, which vary with their age.

BETWEEN THE AGES OF SIX AND TWELVE. The needs of boys and girls between the ages of six and twelve include some smooth, hard area where they can ride their cars and roller-skate. In the open country, there are often no sidewalks available for this purpose, and in some cities the danger of traffic at intersections and from garage drives makes the sidewalk unsafe for the younger children. If boys and girls are to grow strong, self-reliant and resourceful, they need places to climb, explore and build. As they develop an interest in sports and games, the space they require expands. Progressive communities are providing excellent playgrounds, ball fields and tennis courts in connection with schools and parks. But many communities are not alive to these needs and it is desirable to keep children off the streets and under some supervision. If a given neighborhood has even a few facilities such as these, the wise parents try to supplement them, say with a swimming pool on the home grounds, rather than duplicate them. Furthermore, parents have to consider the need for indoor as well as outdoor play rooms, and seasonal or climatic conditions, a semi-shady spot being as necessary to supplement a sunny area in extreme heat as a surfaced area is necessary to supplement the ground in very rainy seasons.

PLANNING IN ADVANCE FOR CHANGING NEEDS AND FLEXIBILITY. All of these considerations call for planning in advance. Furthermore, the problem of what play area to provide for the children and where to locate it is complicated by the desire for flower beds and a bit of grass, especially when the grounds around a house are limited in size. I grant it would be hard to abandon a rose garden or pave a cherished expanse of turf, once time and money had been expended to create such beauty spots. But I do advise looking ahead and planning at the start, when you buy or build, to reserve a specified area suited to the growing needs of your children, realizing



111. Plan of plot and first floor of French Colonial house, designed by Daniel M. Hopping, architect, and Margaret O. Goldsmith.

that from a little fenced-in grass spot for sand-box, swing and see-saw for tiny tots not far from the house (such as the architect, Mr. Hopping, and I have indicated on the plot plan for the French Colonial house on page 159), the play area will expand to take in the little orchard nearby where the children can climb and explore. Later, the area originally allotted to a grass badminton court on this plan could be given a hard surface for various games and still be used for badminton by parents and by the same children in their teens. Or the section we have indicated as devoted to play-yard, vegetable garden and toolhouse, might be thrown together and used for a swimming pool and bath house.

The section of the grounds at the south side of the house, originally planned for the flower garden and sitting places for the grown-ups, would not be changed during all this period of change in the children's play areas. The paths around the house could all be laid with some smooth material on which the children could ride their tricycles and scooters, if this need were taken into consideration in the beginning. It will be noted that there is a terrace outside the kitchen door, where the children could eat in pleasant weather, and a covered porch, also near the kitchen, where they could eat or play on rainy days. If need be, the downstairs bedroom could be used as an indoor playroom. In order to get all these features and a house into a lot 80 feet wide and 120 feet deep, you will note that garage, service, motor court and service yard are placed along the street front of the lot, surrounded by a high hedge, so that no precious space is wasted on driveways through the yard.

SACRIFICE A FRONT LAWN IF NECESSARY. You will perhaps be bothered by the omission of a deep front lawn, and the fact that the house is placed as far forward on the lot as possible. But when you study what is gained by this layout, you may come to the conclusion, as many parents and architects are doing throughout the country, that only by weighing the relative values of a front lawn for show against spaces for all the family to live in, can you break away from what is becoming an obsolete practice.

If building restrictions in your locality prevent locating the house or garage as near the street as you might like in order to free a rear yard for recreational facilities, you might use the front yard for outdoor living as is done in the Koch house described in the last chapter.

THE LOCATION OF THE PLAY AREA. Educators, parents and landscape architects on the West Coast who were interviewed regarding playground facilities, during the course of a recent investigation conducted by *Sunset Magazine*, agreed that the best way to plan for both playground and flower gardens on the same lot was to put the flower gardens in the front or side

yard, and leave the backyard as free as possible for actual recreational use. This general rule does not allow for the fact that in many sections of the country a southern exposure is desirable for children to play in, and might not always be possible at the rear of the house, or that flowers would not grow if the front or side area allotted to them happened to be in dense shade. In such cases, shade-loving plants, trees or shrubs would have to be chosen instead of flowers; the outdoor play area would need to be located where the exposure was the best for the children. Flower borders could be introduced in it later, when the swings, slides, sand-boxes, wading pools, pet houses, jungle gyms, and so on, are outgrown. Or a wading pool could become a reflecting pool for a garden court. What you will not do later will be to change the location of any such permanent features as a barbecue, swimming pool, paved picnic terrace or well-constructed tennis court; so locate them where they will not conflict at any time with future developments.

THE NEEDS OF SMALL CHILDREN. Small children need a sunny place to play near the house, where they can be seen from inside, unless they have a nurse outside with them. Another advantage of a play-yard near the house is that the youngsters can run into the bathroom easily. Some parents solve the problem by combining the drying yard and the playground within view of the kitchen so the maid or housewife can keep an eye on them as she goes about her work. It is quite practical to combine the clothes-drying equipment with the equipment for a swing and trapeze. In several modern homes in the San Joaquin Valley in California, there are two iron posts set in cement about six feet apart at each end of the drying yard. An iron pipe forms the cross bar. A swing hangs from one of these pipes and a trapeze from the other. The clothes can be hung on lines strung between the four metal uprights. One advantage of combining these two functions is that both the washing on the line and the children benefit by the same sunny exposure.

SURFACES, BOUNDARIES AND EQUIPMENT OF PLAY AREAS. The usual play area intended for children under six is equipped with portable sand-box, metal trapeze, swing, shaded table and chairs in a corner of the lawn. When the youngsters tumble, grass breaks the fall better than a hard cement surface would. Experts agree that, for young children, sand or hard-packed earth is better than unyielding cement as a surface for the playground, while macadam tends to be too cold in winter and too hot in summer.

I have spoken of the need for climbing apparatus in children's play-yards. The ladder arrangement shown in the enclosure of a play-yard in

Westport, Conn., below, with two upright ladders and a connecting brace from which the youngsters can hang and do stunts, is among the many ready-made fixtures that can be bought, and if kept in repair, will serve this need. The other apparatus combines a swing, see-saw and ladder. Under a tree is a large sand-box and a ready-built playhouse of slab bark with a plant box in front and chairs inside.



Photo by Richard Averill Smith.

112. Play yard at the Henry Booth home in Westport, Connecticut.

An enclosure of some sort is advisable for any play-area in which you wish very young children to remain safe from traffic, or the tendency to stray away. A picket fence is the least desirable because juniors may climb on the cross rail near the top and fall onto the pointed end of the pickets. In the play yard just discussed (shown above), I notice the points have been cut off of the picket fence, except at the gate.

A high hedge serves as the boundary of the playground in the Washington home of Dr. Paul Stirling Putzki shown on page 163. In a Bakersfield, California, homestead (see the plan on page 16), an adobe wall surrounds the property, and the children's section at the rear of the house includes a jungle gym and playhouse. Note how accessible this area is to the door leading in to the children's bath and bedrooms. In the Herbert Stothart home in Santa Monica, California, a temporary fence has been installed all around the terraces and swimming pool, until the baby gets older. (See page 208.)

INDIVIDUALITY IN PLAYGROUNDS. So much individuality is shown in the various playgrounds I have assembled here, that it may prove helpful to examine them in detail. The spacious back yard of the Putzki home in Washington, D. C., shown below, contains fine old trees, so that even on the hottest days of summer there is cool shade for the hammock swing between two of them. Behind the slide is a sturdy swing furnished, also, with rings and bars for athletic stunts and overhead a support for the basket, when the girls practice basketball. In the foreground is the seed-bed where the girls help at watering, weeding and transplanting each spring. Educators say that the best way to start children out in the gardening hobby is to let them first plant bulbs which they can see as tangible things producing results, or the seeds of vegetables, because they enjoy being able to pick and eat their radishes and carrots. It means much more to them if they have a certain section or little plot of their own to care for.



Photo by Silvia Saunders.

113. Play yard in the home of Dr. Paul Stirling Putzki, Washington, D. C.
Rose Greely, landscape architect.

In Westport, Connecticut, Mrs. Charles Ramsey's home is situated on a lot about 150 feet deep, much deeper than the average town property. The back yard is a large lawn intended as a recreation field for her family, so they can play ball, croquet, quoits and so on, to their hearts' content. A cement path thirty inches wide (see page 164) winds irregularly around the outskirts of it, providing the ideal incentive to ride bicycles, kiddie cars and to roller-skate at home. A simple, square, latticed pavilion with

built-in benches and table, is the scene of many impromptu picnics prepared by the young people themselves.



Photo by Richard Averill Smith.

114. Cement path in the play yard of Mrs. Charles Ramsey's home in Westport, Connecticut.

A TREE HOUSE. If children can be directed and build their own playhouse, much of value will be learned. The two boys who own the unusually complete tree-house shown on page 165, helped shingle it. It is five feet by six, with a door and two windows, and has two built-in beds, one each side of the door, and a drop-leaf table hinged to the wall opposite the door. The platform for it is well braced by lumber bolted into the old willow tree. Probably the best part of the adventure of living up there is scaling the rope ladder and drawing it up to keep off invaders. Near the foot of the willow flows a little brook on which the boys can sail boats and set water-wheels, when they are not splashing around in it themselves.

WATER HAS RECREATIONAL VALUE FOR CHILDREN. Children will play for hours around even the tiniest pool in a yard. Goldfish, tadpoles and frogs are part of the enchantment of such a little body of water. The wading pool combined with a swimming pool discussed on page 206 is worth considering. A children's swimming pool for \$250 is described on page 205. The terrace and back yard sketches on pages 118 and 119 indicate a series of pools against the curving concrete wall that follows the steps down

around the service yard, which would prove a delight for youngsters to play in.



Photo by Richard Averill Smith.

115. Treehouse at the home of Mr. and Mrs. Harold von Schmidt in Westport, Connecticut.

Even if no brook or pool is possible in your child's play area, you can provide a hose spray the children can run around and play in on hot afternoons. In the Polish pavilion at the New York World's Fair, one of the most appealing displays was a child's room with a little wading pool of cement against one wall, and a swing hanging from the beams. Certainly water is among the elemental things children crave in their environment.

THE PLAYHOUSE. Another favorite feature of the play area is the playhouse—the more like a grown-up's house, the better the children like it. The one shown in the background of the picture of a pool for children on page 205 is complete from the little porch to the curtains at the windows. You would look in vain to find a playhouse more charmingly situated than the one called the Bear House, page 166, from Sir Francis Acland's home in Devon, England. It is a country cottage in miniature, even to the thatched roof, and is tucked away in the heart of a garden on top of a natural ledge. The rock plants that surround it are miniature, too, but in scale. Vines grow under the windows and a sweetbriar rose scents the air.

A little girl would live in a perpetual fairyland with such a delightful place to have for her very own.



Photo by Silvia Saunders.

116. Thatched playhouse from Sir Francis Acland's home in Devon, England.

One father built a small playhouse for his children, with the idea that it might have to be moved, as the house the family lived in was a rented house. He placed the sills on a foundation, but attached the structure of the house itself to the sills, so that it was an easy matter to lift the whole affair onto a truck and take it to the new home. The young owners of the playhouse were given full responsibility for it, and were made to realize it was theirs in every sense of the word. When they outgrew it, they rented it to a small boy's club, and finally sold it to a group of newsboys in the suburban town, who moved it and used it to store their papers, and as a distributing center. From many angles this playhouse proved a wise investment, although at the start only its immediate usefulness was considered.

OLD OUT-BUILDINGS AS PLAYHOUSES. Sometimes abandoned out-buildings on the property can be renovated and adapted for use as playhouses. Barn, stable, hen-coop, smokehouse and carriage shed, whatever their past, can still have a future in this capacity when whitewashed, refloored and repaired.



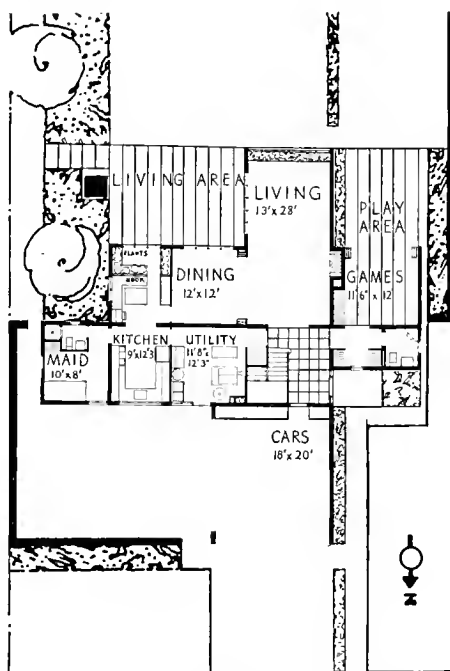
Photo by Richard Averill Smith.

117. Playhouse intended later as guest house, for Harold Tandy in Sharon, Massachusetts. Architects, Bradley and Church.

THE PLAY ROOM ADDITION BECOMES A GUEST ROOM. Often a playhouse can be added to an existing garage merely by extending the roof down at one side and enclosing the small additional area. If the future needs of the home include a guest room, one can well afford to build the playhouse wing on a larger scale for this use after the children have grown up. This was done in the 12 by 16 foot playhouse wing added to the garage of Harold Tandy's home in Sharon, Massachusetts, as designed by the architects, Bradley and Church. (See above.) It projects from one end of the garage at right angles to it, and for the sake of heat in mid-winter, a brick fireplace was built into the wall adjoining the garage, thus saving the cost of an outside chimney. The closets for games and toys at each side of the hearth are backed by fire-resisting wallboard. The fireplace is doubly efficient because it is constructed around one of the modern units for circulating warm air through the room. Cold air is drawn into the air ducts at floor level under the closet doors, is warmed in the flue and returned to the room through a grille just under the ceiling. Opposite the fireplace is a bank of windows, with a southern exposure, so important to

the character of the room now and later. A lavatory can be added later at one side of the fireplace projecting into the garage.

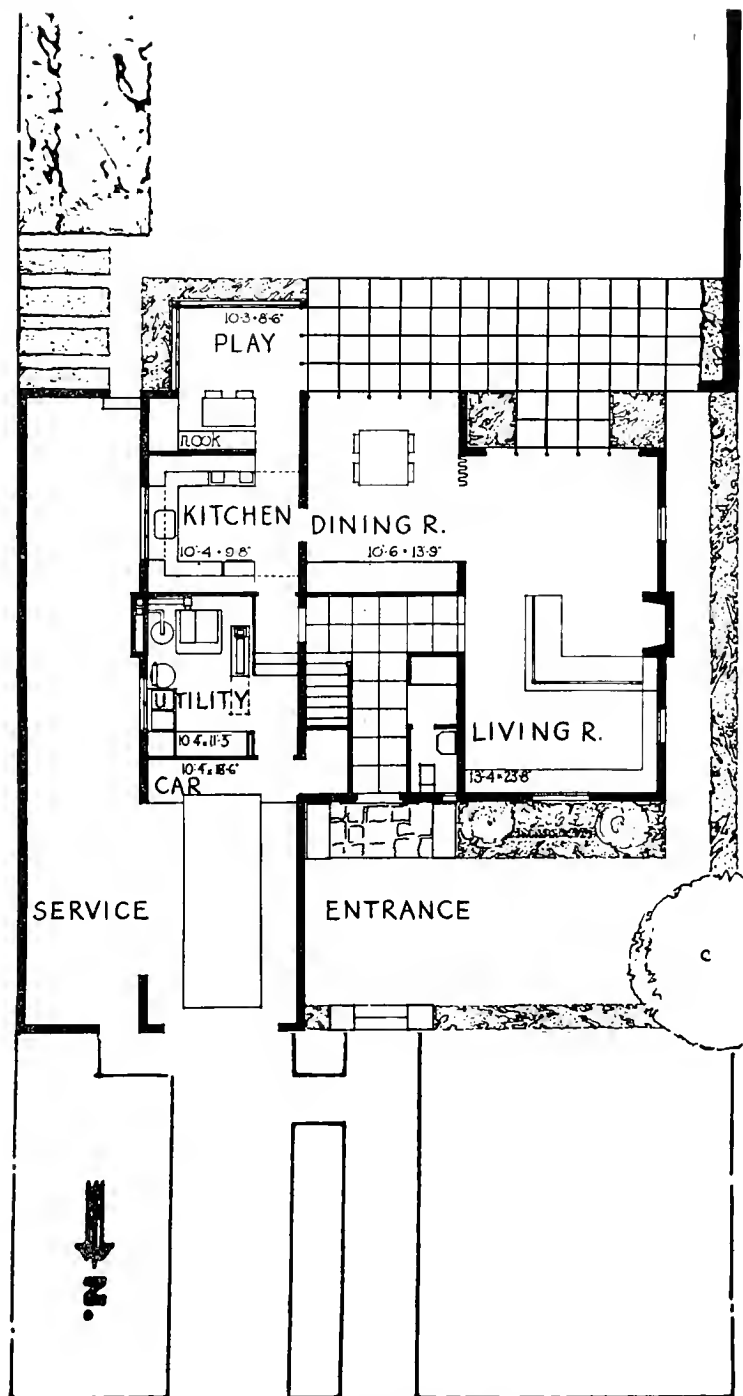
In adding such a wing to the garage, care should be taken that young children do not have to enter it by way of the drive where cars might back into them. Here the entrance door is on the side away from the drive, and leads by a path to the nearest door in the main house.



Courtesy of the American Gas Association.

118. Plan by Clarence W. Jahn and Edwin A. Wagner of Milwaukee, of a prize-winning house.

PLAY AREAS IN AND AROUND THE HOUSE. While these play areas and playhouses I have described are located in the yard not far from the house, and are the means of inviting the growing youngster to life out-of-doors, the average parent has also to consider how to incorporate play areas in the house itself, or in such immediate and close relation to it that we think of them as part of the house plans. *A sense of the out-of-doors, the feeling that they are not shut in*—these are the recognized needs of children everywhere, the year round. You have only to scrutinize the prize plans on pages 40 and 41 in Chapter II and in this chapter, to realize the modern trend to give the children living quarters of their own, both roofed and unroofed, in addition to their own sleeping rooms. We eliminate many rooms considered important in houses built a few decades ago, such



Courtesy of the American Gas Association.

119. Plan by Clarence W. Jahn and Edwin A. Wagner for a small prize-winning house.

as dining rooms, so-called sun porches and parlors. But we do allow for airy, spacious sunny playrooms in modern homes, and we give them an out-of-door quality by means which I shall soon describe even in localities where winters are severe.

PRIZE PLANS SHOW CHILDREN'S PLAY AREAS. The plan of Clarence W. Jahn and Edwin A. Wagner, of Milwaukee (see page 168), has the interesting feature of a living room projecting out between the lounging terrace for adults and the play terrace for children, thus providing a buffer to sound between the two terraces. The children's area has the living room wall to protect one side from winds, and has a roofed and unroofed section that can be thrown together when weather permits, by opening the wide glass doors between, making a room almost 28 feet by 12 feet. So often children in the New England or Midwestern climate could play out-of-doors in raw, blustery weather if the wind were cut off by some protection. This whole area is admirably related to the lavatory and coat closet off the front hall, as anyone will agree who has had the inconvenience of children running through the house from out-of-doors to a distant bathroom. There is a cupboard in the game area for storing toys and equipment, tucked in to the recess made by the fireplace jog. The low hedge of greenery the architect has indicated down the house side of the play area and also inside the retaining wall that bounds the opposite side, helps bring the garden up into the architectural part of the whole unified plan.

The same architects have designed a smaller prize house (see page 169), with a smaller play area, 10 feet 3 inches by 8 feet 6 inches, this time related to the adjoining dining nook and kitchen beyond, and provided with a series of glass windows which make it a sunny, sheltered room in Wisconsin winters, but open in summer. The problem of a place for two or three children to eat, handy to the kitchen but not interfering with the regular family dining room, is here well met.

A New Jersey architect, Mr. John Stenken, has a somewhat similar location for his 10 by 14 foot playroom adjoining a terrace that goes around two sides of the house. (See page 41.)

SEPARATE PLAY TERRACES. When a family consists of a very young child and older ones, it is desirable to have play areas suited to each age group. For instance, in one of the finest new houses built around the owner's individual requirements, the plan on page 210 designed by J. R. Davidson, shows that the baby has a little outdoor terrace and lawn with sand-box outside the nursery, and the boy in the family has a broad paved terrace for his use outside his room, but connecting with the family terrace beyond.



Photo by Esther Born.

120. Terrace and house designed by the architect, Frank Lloyd Wright, for Dr. and Mrs. Paul Hanna in Stanford University, Palo Alto, California.

Both these play areas are accessible to the bathroom shared by the two children.

CHILDREN'S QUARTERS IN A MODERN HOME. To give you a glimpse of one of the most original and yet comprehensive modern play areas, incorporated in the house plan and suited to indoor and outdoor use, I have included two views of Frank Lloyd Wright's honeycomb house, built for Dr. and Mrs. Paul Hanna and their three children, at Stanford University, Palo Alto, California. "The plan as a whole," the architect tells us, "is worked out on the hexagon instead of the usual rectangle. All corners are obtuse as in a honeycomb, therefore a pattern more natural to human movement is the result." Furniture is easier to group for sociability in a room with obtuse angles rather than right angles which tend to be empty pockets. While we are not familiar as yet with hexagonal shaped rooms, we would find them just as suited to human movement and furniture groupings as the oval or circular spaces which we know are easier than rectangles to arrange for living.

All around the house, except for the section next the entrance from the covered courtyard, runs a broad cement terrace, see page 171, which instead of being blocked off in squares is blocked off in the hexagonal design that distinguishes the whole house. This cement terrace has the pleasing visual effect of anchoring the house to the surrounding landscape, emphasizing the horizontals of the long low roofs. It also serves a very definite purpose in the rainy seasons by providing a place accessible to every room in the house for walking and playing, without getting one's feet muddy and tracking into the house. Mothers appreciate this advantage. In any weather, Mrs. Hanna says, it is a "grand place for the children to ride their wheels, skate, play marbles, train, and so forth."

RELATING INTERIOR AND EXTERIOR AREAS. One of the ways of relating the inside and outside living quarters of a modern home, as discussed in preceding chapters, is to keep the materials the same for floors and walls whenever possible, so that you are not conscious of any separation as you go in and out. Another way is to minimize the extent of solid partitions and to have folding doors that can open up whole sides of a room, granted that modern heating and insulating devices are utilized to avoid cold and drafts when the weather necessitates closing these wide openings.

If there is one area in the modern home where parents should endeavor to bring the out-of-doors in, it is the room where healthy, active children are at play. The playroom in the Hanna house illustrates all the ways of doing this. (See page 173.) The cement flooring of the terrace is carried right into the room, and so is the exterior wall construction, which consists of horizontal boarding of laminated wood with recessed joints. The cement

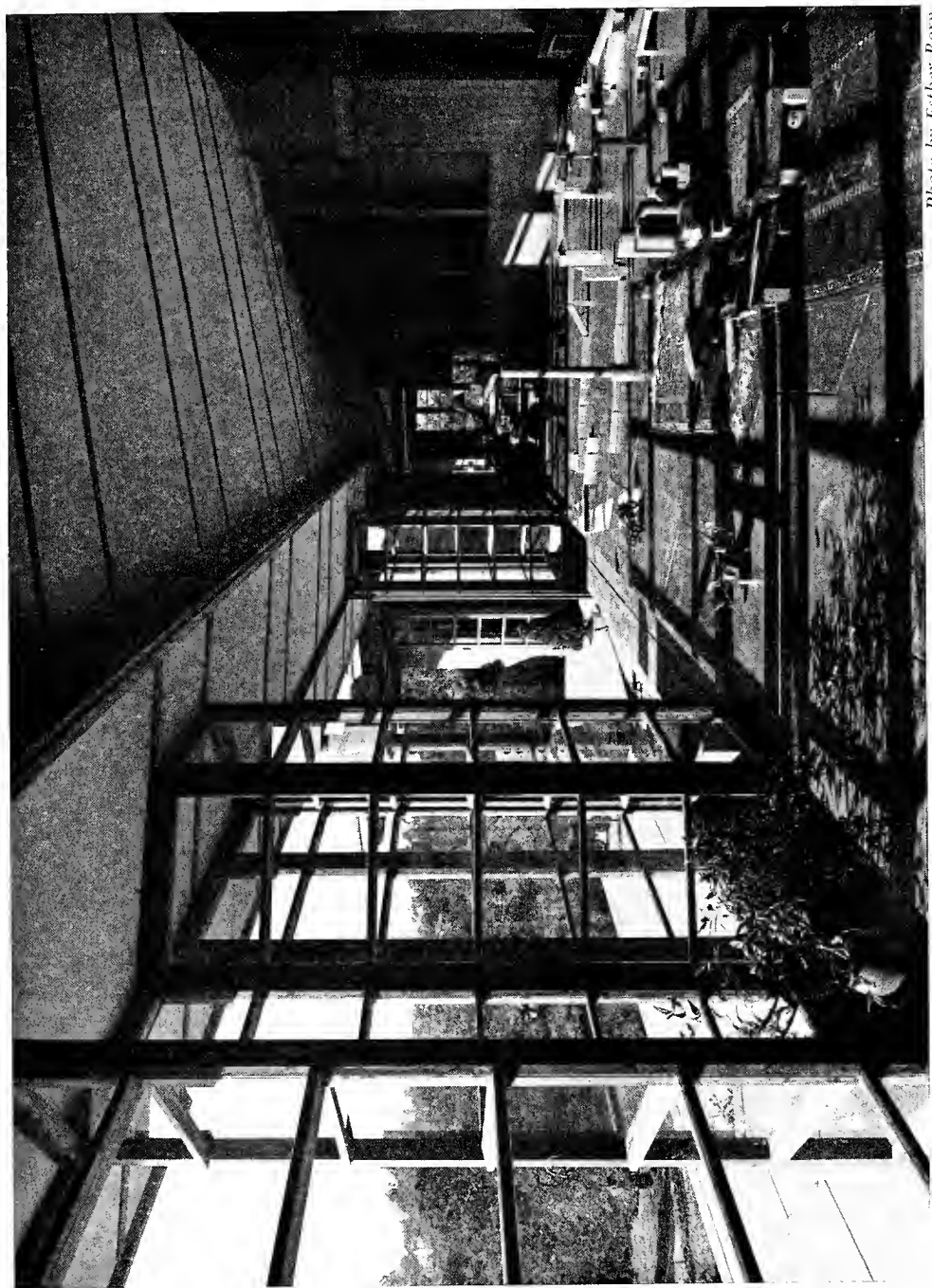


Photo by Esther Born.

121. Playroom in the Hanna home in Palo Alto, California,
designed by Frank Lloyd Wright.

floor is cool in summer but warm in winter because a heating pipe tunnel runs underneath. Seats and tables have been built into the wall spaces opposite the terrace. This as the owners report leaves free, uncluttered space for the youngsters to build great cities with blocks, dance, or express themselves creatively with saw, loom, clay and collections in the sunshine streaming through the open doors. There is a reading corner in a window overlooking a juniper-filled window box.

ADAPTING THE PLAYROOM TO LATER USE. As the younger generation grows up, the same playroom can be transformed by the addition of piano or ping-pong table, desk, card table or tool cabinets, into a study room, music room, recreational room or workroom. When younger members of the family give a dance to their high school friends, the party will spill over onto the adjoining terrace and take full advantage of this extra space. The simple, substantial character of walls and flooring will be just as appropriate to this later phase of the playroom's usefulness as in the beginning.

CHAPTER VII

RECREATIONAL AREAS FOR ADULTS

"FROM A NATION of spectators, America has become a nation of participants. Recreation has become constructive relaxation, truly re-creative and fundamentally active. This is a vital element in a nation that has been termed 'pleasure-loving.'"

With this pertinent observation the architect Oscar Fisher begins his study on recreational requirements, in a recent article in the *Architectural Record* and goes on to say "This has a profound influence on the use we make of our home grounds. The day is not far distant when it will be unthinkable to build a house without ample provision for recreational activity."

FACILITIES FOR RECREATION ON THE HOME GROUNDS. Tennis courts and swimming pools, bathhouses and showers, are the facilities for outdoor sports that the average home owner considers.

The other outdoor facilities which are being incorporated in modern homes include bowling greens; picnic areas; pavilions for dancing; archery ranges; courts for badminton, volley ball, deck tennis, shuffleboard, horse-shoe pitching, quoits, croquet, paddle tennis; areas for soft ball, handball, clock golf, and basket ball; a putting green; a ping-pong table; gymnastic apparatus; rinks for ice skating and curling; ponds for boating and winter sports; trails and cleared slopes in country acreage for skiing and coasting in winter; secluded areas for sunbathing. In addition there are the playground facilities for children already discussed. Many handbooks and pamphlets abound regarding the construction of these facilities.

WHAT FORM OF RECREATION SUITS YOU? The important thing for us to determine is what recreational facilities we wish to include in our grounds and how to plan them in relation to the whole layout. If gardening is an outdoor sport for any of us, we go in for gardens to the exclusion of many other forms of exercise. But when the family interest centers in sports and games, the tendency is to limit the amount of space that calls for gardening care.

I happen to prefer gardening to other outdoor recreation, but I have seen many people start gardening more because other people did than because they knew their own capacity for it, and then abandon vegetable patches and cutting beds and rose gardens in favor of a tennis court or swimming pool because these facilities gave them more fun and because they found they had neither the time nor the money to keep up the

gardens. It will spare you the loss of both time and money to carefully weigh at the start your various interests and eliminate those that are least essential to your happiness. Then allow the necessary space for your form of recreation. See the list of space dimensions for various sports on page 350.

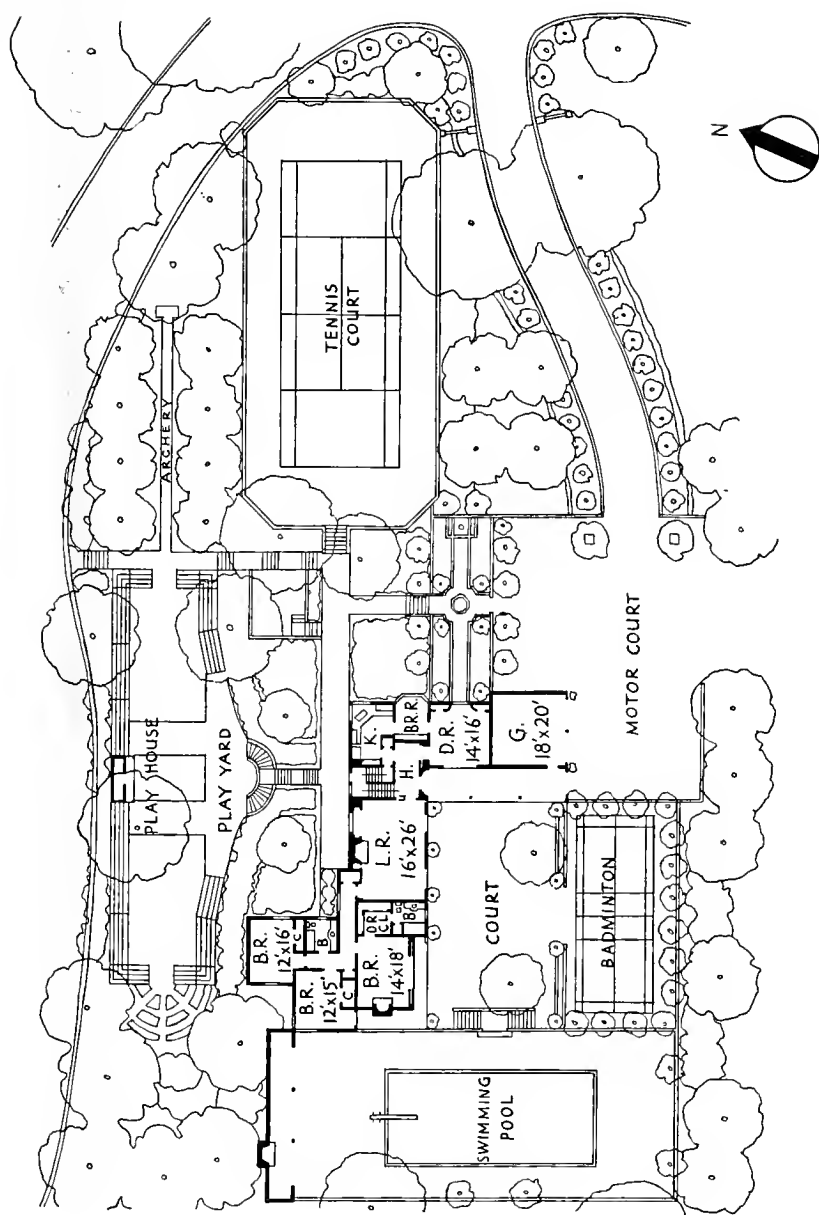
LAYOUT FOR A SPORTS-MINDED FAMILY. You would know from a glance at the plan on page 177 that the family for whom it was designed cared more for strenuous outdoor sports than for anything else. The house is simple and unpretentious, the piece of property not large. But in this modified rectangle, about 225 feet by 140 feet, the architect and landscape architect worked together to provide an L-shaped house of nine rooms and four baths; a garage, a large motor court, admirably related to the garage and entrance corridor; a paved patio surrounded on two sides by house walls; a badminton court; a swimming pool with a pavilion and barbecue at one end for outdoor entertaining; a playyard behind the house with a playhouse and children's garden; an archery range; a tennis court; and a garden outside the dining room. To arrange the space to accommodate all these specialized areas, and plan for paths, a driveway, and trees and shrubs called for great skill plus an understanding of the many problems involved.

THE TENNIS COURT. The house is situated well back from the road to allow for the tennis court in the first triangle formed by the drive and encircling road. Besides the actual playing space of 78 feet by 36 feet for a double court, a minimum of 16 feet at the ends and 12 feet at the sides is desirable in such a plan to allow proper space for retrieving deep shots. It is important to orient a court, so that the net is as nearly as possible in line with the path the sun takes across the sky at the season when the game will be most indulged in, to avoid having the players face the blinding sun.

In order to wash off a cement or asphalt surface or to wet down clay, one should have a water connection to which a hose can be attached somewhere near the court. It is convenient to have a faucet also at this connection where drinking water can be run off into a pitcher or, better still, have a bubble fountain if you do not want to carry water from the house for every match.

A tennis court is not in itself decorative and there is no special advantage in having it adjacent to the house. It can better be located a little distance away, as in this plan, with trees and shrubs to conceal it from view.

SEPARATING THE CHILDREN'S PLAY AREA FROM THE ADULT GAME AREAS. Note the location of the children's play area on the plan. By locating the house midway between the two sides of the property, it is possible to



122. Plan of first floor and grounds of a California house designed by Frederick L. R. Confer.

separate the adult facilities from the children's play yard. It is unwise, of course, to have the children play in the shadow of a building. Here, although the area is to the north of the house, the playhouse and most of the yard is out from the shadow of the house and open to the morning and afternoon sunshine.

The archery range down through an alley of trees opens off the children's play yard and affords an extra run for certain games as well as a pleasant walk apart from its particular interest. It would be unwise to have beds of flowers or tall grass to the right or left of it or beyond, as this would make it hard to locate arrows that fly afield.

THE HOUSE LAYOUT. The ideal motor court is adjacent to a garage and affords entrance to a house under cover. That is the plan here. The covered corridor extends from the garage along the open court to the front door. The house is built around this, and all the living rooms open onto it, as well as three downstairs bedrooms. Over the kitchen, dining rooms, and garage, there is a second floor with two bedrooms and baths, and with a balcony around three sides of it.

THE AREA NEAR THE HOUSE. Life centers around the brick-paved patio that, like the living room, is planned for its sunny exposure and protection from north winds. Flowering shrubs in tubs and two fruit trees growing in raised beds of flowers bring natural beauty into this area. The view down into the swimming pool at one side contrasts with the grass badminton court on the other side, which can be used as an extension of the lounging terrace when games are not in progress. Here it is bordered by shrubs which are high enough to give a feeling of enclosure and keep sudden breezes from affecting the flight of the bird.

The swimming pool is like a third outdoor room on a lower level (see photo on page 179), with the retaining wall toward the terrace, low walls on two other sides and a pavilion backed by a high brick wall connecting with the wall of the house at the north end. In the wall a fireplace is built, and over it extends an awning supported by posts so that the shade at this end is a gathering spot for outdoor meals after swimming. The brick veneer of the house is painted blue, with white trim for the shutters and steel casements, and the same blue and white colored scheme is carried out in the brick work of the outdoor areas.

THE UPKEEP OF TENNIS COURTS. While the installation of these numerous recreational facilities was costly, the upkeep is less than cultivated gardens in the same areas. Tennis courts, for instance, if of clay, have to be re-surfaced occasionally, and there are many preparations such as brick dust and fine crushed stones on the market for the purpose. They need occa-

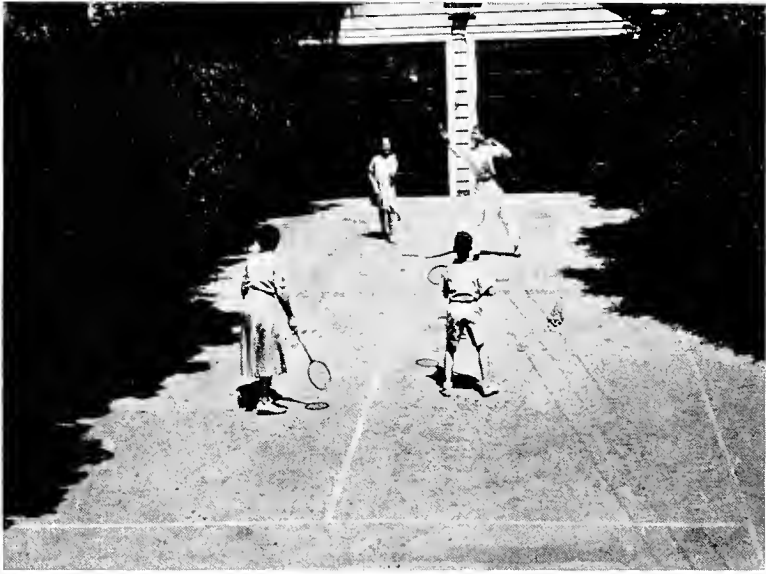
sional applications of some preparation to absorb moisture, kill weeds and hold dust. For a weed killer, agricultural salt is effective and inexpensive. A clay court is improved by wetting it down occasionally, although rains do this better than we can. After heavy rains have dried off on clay courts, they may need to be dragged with a mat and rolled smooth. An asphalt or cement court costs more to build but less to maintain. Asphalt is in general use in the west. A clay, tuffa, or concrete tennis court can be used for other games that require less space, such as badminton and volley ball, by changing the tapes and leaving the net stationary. This was the intention in planning the concrete court at the Stothart place shown on page 209.



Photo by Waters and Hainlin Studios, courtesy of House Beautiful.

123. Swimming pool and barbecue in a California home designed by Frederick L. R. Confer, landscaped by Ned S. Rucker.

BADMINTON COURTS. A badminton court is often preferred to a tennis court because it is simpler to build and care for and because badminton is a simpler game than tennis to play. It is smaller than a tennis court (see page 350), and because the game is to keep the bird in the air, the surface does not matter so long as it is level. Grass is the usual surface because it is the easiest to provide and maintain. But as badminton can only be played when the air is still, the court is often planned so that it can be used also for croquet, paddle tennis, deck tennis, tether tennis, pin-ball, etc.



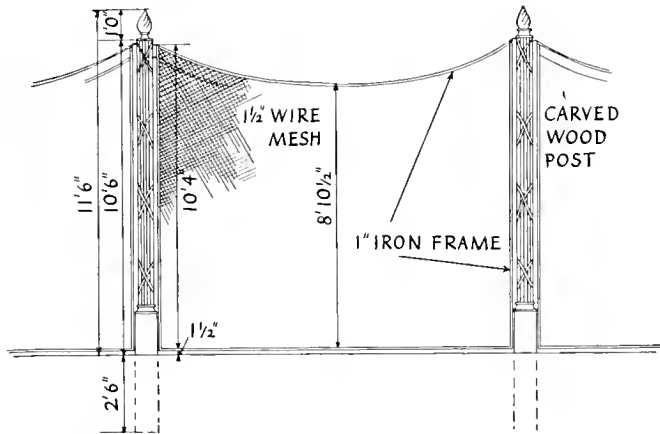
Courtesy of Portland Cement Association.

124. Multiple-use play court in a concrete driveway.

A MULTIPLE-USE COURT IN THE DRIVEWAY. By widening one's concrete driveway, a multiple-use court can be made at little extra cost for the games just mentioned and also for basket ball and shuffleboard. Playing lines can be painted or permanently integrated into the court by using colored concrete for them when the wide drive is built. The photograph shown above shows a family playing on their multiple-use court in front of the garage. Concrete mixtures for play courts and instructions for mixing concrete for small jobs like this are given in the pamphlet, *Concrete Improvements Around the Home*, sent on request by the Portland Cement Association.

GOOD-LOOKING BACKSTOPS FOR TENNIS COURTS. Chicken wire on rough timbers, with Dorothy Perkins roses clambering over it, one often sees and deplores as the backstop for a court. Chicken wire is the least attractive of all the possibilities, and is not nearly as durable as the many rust-proof meshes that have more stability. Vines on backstops are likely to be a nuisance because they catch the ball. The landscape architect, Fletcher Steele, finds a double screen the most satisfactory; vines may cover the outer wire while the inner one is left clear. Dorothy Perkins roses look more decadent as they fade than many newer varieties of roses, such as Dr. Van Fleet, which might be grown on an arbor for spectators near tennis courts. The choice of posts and the spacing between them is an important factor in a well-designed backstop. One could use small mesh

fish-nets between round cedar posts with or without simple finials. Such posts are not expensive, and can be kept from deteriorating with a fence preservative.



125. Sketch of backstop for tennis court at the Charles MacArthur home in Nyack, New York, designed by the landscape architect, Mary Deputy Lamson.

Mary Deputy Damson designed a really good looking backstop for the tennis court at Helen Hayes's home in Nyack. (See the sketch above.) The posts are hand carved, and measure eleven feet six inches from the ground to the top of the finial. They are spaced twelve feet six inches apart and have a wire mesh attached to a one-inch iron frame shaped with catenary curves between each post.

SHELTER NEXT THE TENNIS COURT. A spectator's gallery next the tennis court such as is shown on page 182 designed by Harold W. Grieve may add greatly to the pleasure of the game. It can be screened in localities where flies or insects are a nuisance. The glass door here opens onto a garden path so that spectators do not have to reach the shelter from the court. The interior is painted white and has curtains of white wire mesh with red painted borders. There is a game closet large enough for card tables in one corner and a small bar with a refrigerator and a cupboard for glassware in the other corner. Often showers and dressing rooms are built in such a structure, and a tool shed behind it for the roller and other equipment that is needed if the court is of clay.

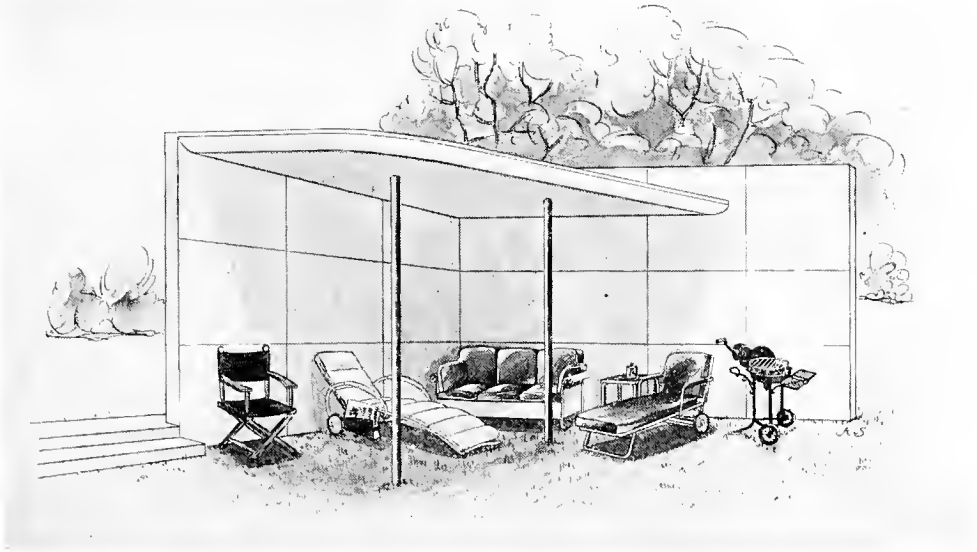
If house and grounds reflect the modern trend in architecture, a light plywood shelter like the one in the sketch on page 183 is appropriate. Care must be given when using plywood or the plywood product Weldwood, which is advisable for outdoor use because it resists delamination better. It has a tendency to check, which may be materially cut down



Photo by Fred R. Dapprich.

126. Spectator's gallery for tennis court at the home of Arlene Judge, in Beverly Hills, California, designed by Harold W. Grieve.

by using a resin sealer over the wood before painting or varnishing it. The exposed edges of any plywood product must be carefully coated as well as the flat surface.



127. Sketch of a plywood shelter for a tennis court.

A PORCH FOR PING-PONG. In the Carl Long residence at San Merino, California, the architect Donald Beach Kirby has planned a covered porch overlooking the badminton court where a ping-pong table is set up for use at times when fog or rain drive people under cover. (See page 184.) Here the chairs and settee are the right additions to the equipment for the game itself. The arbor which continues beyond the roof of the porch could be used for deck games if the flooring were of a smooth unbroken surface. Both porch and arbor are near enough to the badminton court to provide a place for spectators.

A BOWLING GREEN. The bowling green on the grounds of the late Noble Hoggson at Redding, Connecticut (the photograph is on page 185), was only a muddy marsh stretching down to a bend in the Aspetuck River when Mr. Hoggson acquired the property. By filling in the land and draining the marsh, he began the development that became a much prized beauty spot as well as a mecca for devotees of the game on lazy summer afternoons. It took a dozen years for the trees and shrubs on each side of the path that encircles the green to provide the shady alley they do now, and for the elms to gain their height and grandeur at the far end of the turf where the vista opens down to the river. The woodland path around the green is a necessary as well as a delightful feature because only the

players with heelless shoes are allowed to tread on the turf. Spectators therefore use the path to get to the marquee shaded by a blue awning half way down the green.

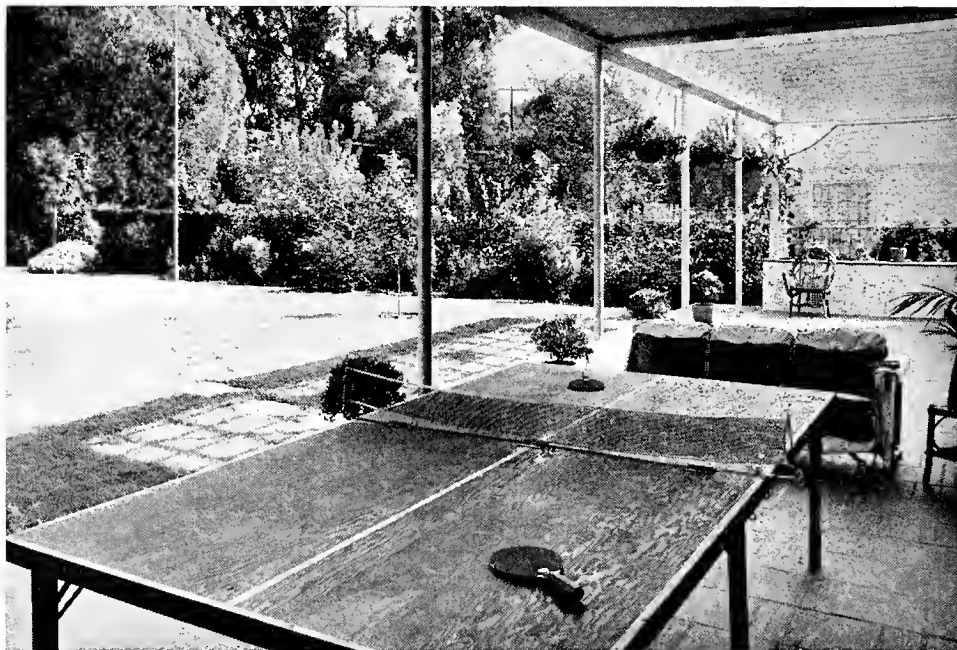


Photo by W. P. Woodcock.

128. Ping-pong table, porch and badminton court at the Carl T. Long residence in San Merino, California. Architect, Donald Beach Kirby.

The bowling green itself is 125 feet long by 55 feet wide and when the game is in progress is divided by white cords into three rings fifteen feet wide, and the length of the court. It is essential that the turf be as closely matted and as smooth as a billiard table. Bent grass is used here, rolled frequently and cut by a power mower five ways to avoid any possible unevenness. By sprinkling it twice a season with worm eradicator, the slight eruptions of soil that worms make around their holes are avoided.

STREAMS AND PONDS. Below the bowling green on a lower level next the river is the boathouse where canoes attract the young people. They can canoe a half mile below to an old mill pond and upstream for several miles. When prospective home builders wonder whether to buy property in a valley near a marsh and sluggish stream, they should open their eyes to the possibilities these two natural features offer for recreation.

One friend of mine who bought above five acres of Connecticut meadowland, woodland and swamp, found so many springs feeding the swamp

that she had the lowest part of it dredged out with a steam shovel to hard pan into a kidney-shaped pond with a small island of higher ground left in it. The basin filled up quickly and proved deep and spacious enough for swimming, though it is mostly used to paddle around in a sixteen pound sport kyack, as the owner prefers salt water bathing at a beach not far away. The total cost of dredging the basin and building a ten-foot dam of rocks and mud at the lower end, and digging the ditches for the surrounding swamp to drain, was under five hundred dollars. It adds more than that to the value of the property, besides setting off the house.



Photo by Old Masters Associates.

129. Bowling green in the Noble Hoggson home in Redding, Connecticut.

DANCE OUTDOORS. An open air dance floor is an unusual feature for active young people to enjoy. The one shown on page 186 is at the home of Norman Peters in Miami Beach along the waterfront. It consists of a terrazzo circle with a fifteen foot radius laid on a concrete slab with an additional five foot border of quarry keystone. A brick fireplace has been built around one section of the circle, and the wall behind it rounded down to form the backing for hobs of brick and a low wall that serves as a bench between dances. A hedge forms the back of the bench. A bignonia vine has grown over the wall and drapes it with blossoms bright as tangerines. Opposite the fireplace next the water is an arbor with built-in seats where moonlight on the water can be enjoyed to the full. A portable radio or victrola furnishes music for the dancing, although a small orchestra could be accommodated in the arbor on special occasions. A similar dance floor



Photo by Moffett Studio.

130. Outdoor dance floor at the home of Norman Peters in Miami Beach, Florida.
Architect, Carlos B. Schoeppl.

could be laid in parts of the country that get frost and snow if the concrete base was constructed to withstand frost as it would be for a road.

A PADDLE TENNIS COURT FOR SUMMER AND WINTER USE. Paddle tennis is a speedy game gaining in popularity these days, especially because it can be played in winter and because it requires less space than tennis. The balls are of spongy rubber; hence they do not lose their resiliency as tennis balls do in freezing weather. The expense of a court is less than for tennis because it is smaller and is usually a wooden platform. Such a platform can be built out on a slope, saving the cost of grading. Seasoned fir is the wood usually chosen, laid with cracks between the boards for expansion in wet weather.

A family in Glenbrook, Connecticut, erected a platform 21 by 45 feet on a gentle slope, supporting the platform where it is off the ground by heavy cement blocks six inches square. They netted in the three sides that are above ground level, and use it all the year round. In winter it is sanded to keep ice from coating thickly, and then brushed off before a game.

HAND BALL COURT FOR WINTER USE. The American game of one-wall hand ball has become a favorite winter activity and can easily be accommodated if you have level space 20 feet by 34 feet in size with a sixteen-foot wall such as the back of a barn or garage at one end of the space. A wooden platform like a tennis court is needed to give an accurate bounce, and the wall should be well braced.

FLOODING THE TENNIS COURT FOR SKATING IN WINTER. Skating is among the winter sports you can enjoy on home grounds, in northern winters, if you have a clay or concrete tennis court to flood for the purpose. The preferred method is to spray the court when the temperature is from ten to fifteen degrees above zero, building up slowly a layer of ice about three inches thick. To do this the court has to be banked around the edge to hold the water. Where one has a hose connection in the cellar or in a heated garage convenient to the court, the rink is sprayed by hose, preferably one fitted with a small outlet. It is best to spray thin layers and repeat after each freezing. This makes a smooth surface.

Running water is not always available near private tennis courts. The solution then is to mount a barrel of water on a sled and by pulling the sled back and forth sprinkle the court through a one-inch pipe attached to the barrel. The pipe may have holes drilled in it a few inches apart. If the pipe is three feet long, this system works without much expenditure of time or effort. The rink needs to have snow removed soon after it falls, to be scraped occasionally and to have the cracks filled or sprayed from time to time.

Young people can adapt shinny hockey and curling, broom ball and ice shuffleboard to the size of their tennis court as a rink and find plenty of amusement from these games and figure skating.

PONDS AND SKATING PARTIES. Anyone with a pond in New England, need not fear isolation on winter week-ends. It will be a rendezvous for hockey and curling devotees and for those who want to renew their youth playing snap the whip. The outdoor fireplace one associates only with summer comes into play for such occasions if it has been located near the water where skaters can congregate for hot dogs, hot coffee and a chance to warm their feet. Frank Hawks, the flier, had an ingenious arrangement for heat at his skating parties. Next his pond at Redding, Connecticut, he had a circular space ten feet in diameter enclosed by a low wall of bench height. In the center a fire was laid radiating heat in all directions. On a still evening guests could sit on the wall, extending their feet to the fire all around it. But if the wind changed, they could shift about to avoid the smoke. Flood lights and dance music from a portable radio, the fire and hot food, made these occasions long to be remembered.

Any rough shelter to be used at the edge of a rink should have a wooden flooring rather than cement or stone, so that skaters can come up to the fire to remove their skates without dulling them. Planks should be laid temporarily for walks and flooring around outdoor grills in winter for the same reason.

CLEARING SLOPES FOR SKIING. The average person may look on skiing as a luxury sport calling for Alpine heights and built-up wooden jumps. But cross-country skiing down gentle hillsides is more popular with amateurs and less hazardous than ski jumping. It does not call for any expense beyond that of clearing trails if you have woodland acreage, and clearing sloping fields of large stones and stumps, which in itself is good fall and winter exercise.

Stuart Chase has several hilly fields of abandoned pasture land, grown up to cedars and rough underbrush, behind his house in Redding, Connecticut, which he has made available for winter skiing in this way. The snapshot on page 189 is proof that skiers are having fun on the wide clearing he has cut over a series of little hills. He has many young spruces and black walnut trees recently planted on this property, and in case of brush fires in times of drought the ski trails serve as fire lanes to help control the situation. Moreover, the ease with which he can get to the trees to cultivate them occasionally, and the pleasure possible now in strolling out on these paths to special vantage points on rocky knolls for picnic suppers in summer, make them doubly useful.

Even a comparatively small area of sloping, open lawn, such as a suburban yard might offer, can provide ski practice and recreation if it is marked off by poles in a winding run so that you can weave your way down between the markers in a *slalom*.

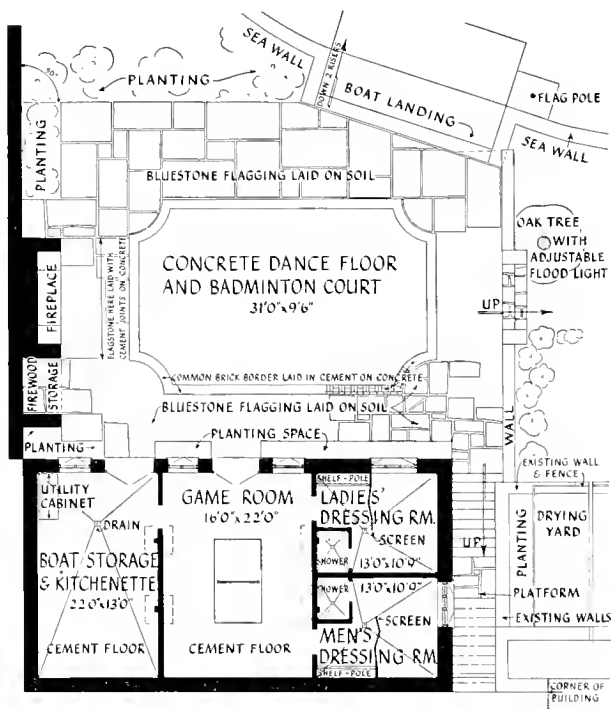


131. Ski trail at Stuart Chase's home in Redding, Connecticut.

A GAME PORCH OR RECREATIONAL BARN. Game rooms in basements have had a recent and widespread vogue and serve the family with an adequate area for indoor games and sports. But I would like to advocate game porches with sash or walls on three sides and one side open to the weather even in winter time for the active games that can be played on such a porch, keeping the participants in the sun and air. Lights would make it possible to play also at night. An old barn on a country property can be fitted up for young people to use on rainy days. The large barn doors may be left open for sun and air when weather permits, a decided advantage over basement rooms.

One mother had her barn remodeled for dances to keep her young people happy during summer vacations from school and college. It is often desirable to have such facilities to keep the family at home rather than

tearing around the country Saturday evenings to country clubs and dance halls. Because it is away from the house, the sound and the confusion is spared the older members of the family. Adequate parking space, well lighted, is necessary if you entertain large groups at barn dances.



132. Plan of the recreation house and playcourt at the Walter S. Wing home in Rye, New York. Architect, Harry Leonard Miller; landscape architect, Rosalind Spring LaFontaine.

INDOOR AND OUTDOOR PLAYROOMS ON AN UNUSED SLOPE IN RYE, NEW YORK. On a none-too-large waterfront property in Rye, New York, a house and garage were built a few years ago on top of the slope above the lake formed by an inlet from Long Island Sound. In the course of time, as so often happens, the need arose for more driveway and parking space in front of the garage. The owners called in the architect Harry L. Miller and the landscape architect Rosalind Spring La Fontaine to work out this problem and adjust the planting. In considering the possibilities, both designers felt it was a shame to waste the space under the new 46 by 25 foot platform that had to be built out over the slope toward the water. The owners suggested having a structure planned under it, with a room in it large enough to house the ping-pong table. This had been unsatisfactorily located on a canvas-covered terrace off the living room, thus rendering the terrace

unusable for anything else. When the young girls in the family and their friends were playing there, all other occupations in the home were interrupted because of the close proximity of the excited youngsters.

Then, since bathing in the lake is the leading summer activity for the family, it was decided to incorporate showers for both sexes in the new recreation building. This would enable the members of the family and their house guests to bathe and dress without tracking up the house, and friends in the neighborhood could come and use the bathing beach without disturbing the household.

So a game room, 16 feet by 22 feet, and dressing rooms, were built in the stone structure roofed by the paved parking area. (See page 190.) All the floors are of concrete. A third section was planned to store canoes, skis, skates, hockey sticks and other sports accessories. It houses extra firewood for use in the fireplace outside. It has shelf space and also an electric range, refrigerator, sink and cupboards combined in one of the utility cabinets intended for apartment house use. Thus a supplementary cook stove, dishes and cooking utensils are accommodated for the occasions when groups are being entertained at the outdoor grill. Hot and cold water connections were made from the main house.

The outdoor fireplace and play court, which developed as an afterthought next the recreation building, is to my mind one of the most ingenious and successful arrangements for modern recreational needs that I have come across anywhere—east or west, north or south. (See page 190.) Of course, its particular advantage lies in the fact that it is next a waterfront and has the existing boat-landing in one corner as the exit to wider fields of activity. But it has many advantages that any court could have. It is situated only a few steps down from the terraced lawn at the side of the house, and is accessible from the new parking level by a flight of steps next the recreation house.

The court itself has a central concrete area 31 feet long by 19 feet wide, with concave corners, surrounded by a wide paving of bluestone. A border of common bricks is laid between. It is really a patio because of the enclosures which form a sun and wind trap for comfortable sun-bathing even on cool days. Study the picture on page 192.

The concrete play court has holes so that iron pipes may be inserted to hold a net for badminton and deck tennis. Black lines in the concrete mark off the game area. It is used for many other games, and also for evening dances. Then the place is lighted by an adjustable floodlight high up in the oak tree overhanging the terrace on the side toward the house. This can also be turned on the boat-landing for embarking a canoe at night, or it can play on the lake in winter time when skating and hockey games are in progress and a roaring fire is burning in the fireplace, hot dogs are

sizzling and coffee is brewing on the grill. There is a combination radio and record player in the ping-pong room which can be pushed out to the edge of the dance floor connected with an electric outlet in the wall outside.



Photo by George Van Anda.

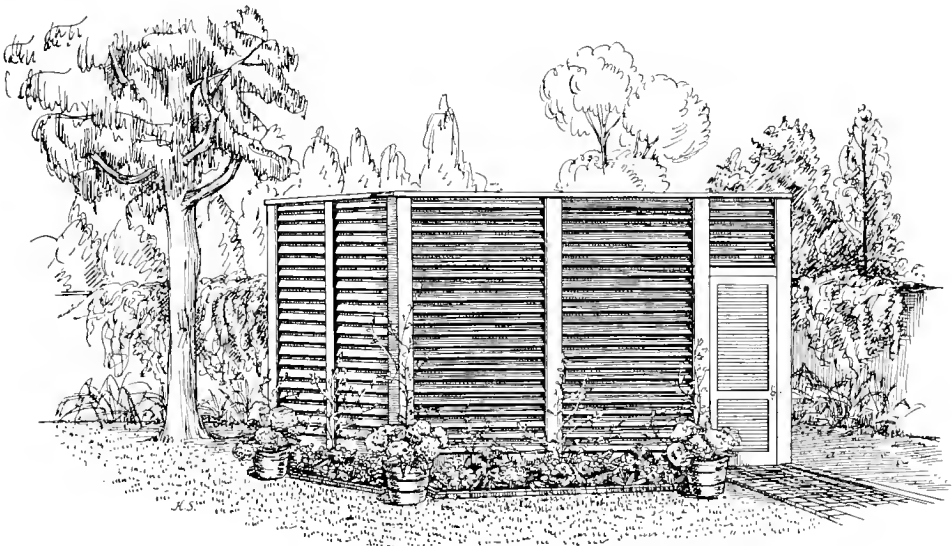
I33. Recreation house and play court at the home of Mr. and Mrs. Walter S. Wing in Rye, New York. Architect, Harry Leonard Miller; landscape architect, Rosalind Spring LaFontaine.

PLAY COURTS GET YEAR-ROUND USE. There are countless occasions on which the fireplace and spacious court have been put to use for outdoor entertaining. On the Fourth of July, fireworks are displayed on the lake after an outdoor supper. Following football games in the fall, it has been the scene of jolly celebrations, and also for Christmas parties. Home owners in the east are waking up to the idea of such an indoor and outdoor play area for the younger generation to enjoy all the year round, especially since sports have become so popular.

OUR HOMES ARE TEMPLES TO THE SUN. Today we are a nation of sun worshippers. We dress for outdoor sports with more chance for sun and air to play on our bodies, restoring vitality to us. We build our houses so the living rooms and bedrooms and terraces are flooded with sunshine. We use our vacations intelligently in places favored by sunshine. One vacation

home, designed by Charles O. Matcham, for winter use in Palm Springs, California, illustrates this trend to perfection. It has two broad patios open to the sun and views, one of them illustrated on page 229. It has, also, a terrace off the living room and a screened porch to the northeast, off the dining room, to which one can escape in the heat of the day and still be outdoors. It makes use of every exposure—north, east, south and west—with the idea that you can follow the sun around the house all day if you like. Some shade is available on the south patio, by an awning overhead constructed like Venetian blinds to cut out glare and at the same time let air through when desired.

ARE YOU A HELIOPHILE? Stuart Chase spoke for thousands of sun-lovers when he said, in an article in *The Nation*: "Some people collect postage stamps, others old masters. I collect ultra violet rays, preferably non-synthetic." Mr. Chase has known hundreds of men and women "who have loved to bathe, to lie on summer sands, to feel the sun striking into their marrows but who have been utterly untouched by that deeper call which binds them eternally to Helios." Even so, in his opinion, "If the republic wants to go native and can hold to it with any fidelity, it will do more than any other conceivable action to balance the inhibitions and pathological crippings induced by the machine age and the monstrous cities in which we live."



134. Sketch of a louvered enclosure for sun-bathing.

FACILITIES FOR SUN-BATHING. Enclosures which insure privacy but allow air to penetrate are practical for small sun-bathing shelters. Hedges of dense

growing evergreens such as Carolina hemlock, white pine or arbor vitae may solve the problem. There is a fencing available in any desired height of thin oak strips interlaced in a basket weave fashion that answers the purpose admirably. Temporary and removable partitions can be arranged for sun-bathers on lawns and terraces. The curtain materials that endure out-of-door conditions, such as canvas, sail-cloth, awning material and spun glass, may be installed on rust-proof rods, to be drawn at will across a corner of a garden court, with perhaps an outdoor shower built into the same area. Nothing is more exhilarating than a shower bath in the open air after a session of exposure to the sun, and showers are much less expensive than pools. The patio with a ten-foot wall all around it, outside the living room in Summer Spaulding's home, described on page 23, affords the privacy that makes sun-bathing a relaxation



Photo by Samuel H. Gottscho.

135. Garden entrance and balcony of the J. B. Moos house at Miami Beach, Florida. Architect, Robert Law Weed.

If you can build a square unroofed enclosure with louvered walls and a louvered door in some corner of your premises that is open to the sun, you are assured of privacy without loss of circulating breezes. The air comes through the spaces between the louvres. (See the sketch on page 193.) Or you can buy portable sun-bath houses on rollers from sports equipment

stores, which can be used on roofs or open platforms. They have awning cloth curtains all around.

SUNDECKS. Sundecks with an enclosure high enough to seclude anyone reclining on the deck can be built over garages, as in the plan on page 159 for a French Colonial house.



Photo by Samuel H. Gottscho.

136. Ocean side of the James A. Moffett residence in Palm Beach, Florida. Architect, John L. Volk.

Balconies adjoining bedrooms are sometimes enclosed with a solid balustrade. See the photographs on page 77 and page 74 in the Marshall Cole home in New Hope, Pennsylvania and the Herbert Stothart house in California. In the house in Miami Beach, shown on page 194, the balcony looks out onto an enclosed garden. The door below it is the garden entrance to the living room. The balcony is narrow but serves several purposes. One can step out for setting-up exercises in the sunshine before dressing in the morning. It keeps sudden rains from penetrating into the bedrooms where windows can be left open even during rains, and it shades the rooms below just enough for comfort in this tropical climate.

You may like to play with a medicine ball on the beach, while you get up your circulation, then swim and afterwards stretch out in the sand.

The photograph on page 195 shows both the medicine ball and the waterproof mat with raised head on a low terrace near the water at Palm Beach. Above is a balcony, an ideal spot for sun-bathing near dressing rooms.

The stunning dynamic curves of the decks as they complete the mass of the house and the sea wall, suggest the resilient power of palm trees. They have the rhythm of the rolling waves and the cloud billows that are the moving floor and ceiling of marine spaces. If we can judge any creative piece of architecture by its ability to evoke in us an emotional as well as an intellectual response, then this house is a little masterpiece. The designer's sensitiveness to the inner needs it must serve, and to the surroundings of this specific site, has carried the form of it into the realm of cosmic beauty which many modern houses fall short of attaining.



137. House at Chertsey, Surrey, England. Architect, Raymond McGrath; landscape architect, Christopher Tunnard.

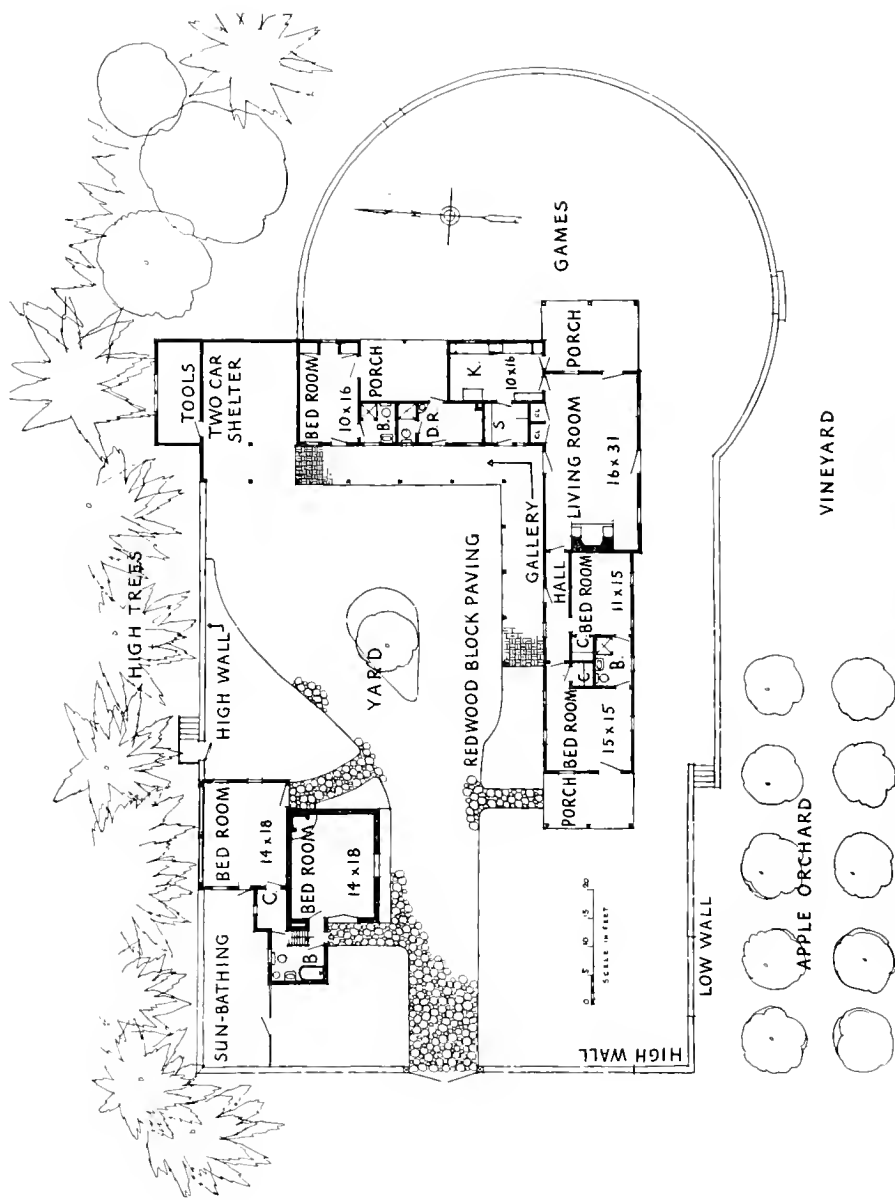
A RECREATIONAL ROOF. In an English home of reinforced concrete, at Chertsey in Surrey, the architect has adapted the extensive flat roof as a game area and sheltered sitting space, with beams and piers to frame views and cast some shade. Study the photograph above. But sun-bathing with privacy is assured by the balustrade around the roof. A spiral stair connects it with the terrace on ground level. Note also the circular balcony off the main bedroom on the second floor, with an old wistaria growing up to deck the railing.

A VACATION HOUSE BUILT FOR THE SUN AND THE SIMPLE LIFE. When William Wilson Wurster designed the farmhouse with its compound wall



Photo by Roger Sturtevant.

138. General view of Gregory Farm in the Santa Cruz Mountains, California. Architect, William Wilson Wurster.



139. Plan of the farm for Mrs. Warren Gregory, in the Santa Cruz Mountains, California. William Wilson Wurster, Architect.

(shown on page 197) for Mrs. Warren Gregory, in the Santa Cruz Mountains of California, he developed a location with all the high trees on the north of the house so that no shadow would be cast on the living area. When the family came up here for contrast with city and professional life, sun was what they wanted wherever they sat or played. A definite area for sun-bathing in the nude was arranged inside the high compound wall in the corner, still further enclosed by the walls of the separate guesthouse inside the entrance to the courtyard. See the plan opposite. This guesthouse has two bedrooms and bath below and a third bedroom in the tower over the water tank. The building was planned away from the main house to separate the various age groups who come here week-ends. Because domestic help is available from neighboring farms, it is not necessary to provide service sleeping quarters.



Photo by Roger Sturtevant.

140. Dining porch at Gregory Farm. Architect, William Wilson Wurster.

While the farm is situated in an old orchard and vineyard, it is not run as a productive enterprise. In fact, the grounds inside the wall were designed to eliminate maintenance as much as possible. Thus a paving of blocks of redwood avoids upkeep in the broad entrance court and makes a decidedly attractive surface there. Only such plants and shrubs were set out as would not require watering, yet the house is far from bleak.

The semicircular game area 40 by 80 feet in extent is the feature of the grounds east of the L-shaped house as indicated on the plan on page 198. The surface is the natural, hard-packed earth, part clay and part sand.

Here the children can play ball, ring toss, have swings and slides, and ride their scooters. Here the adults can pitch horseshoes; play croquet, bocci, deck tennis, volley ball, toe ball, or clock golf; fence; throw darts; practice tennis and try their skill at skittles and badminton. Spectators have two porches to overlook the games and the mountain views. One, shown on page 199, is situated close to the kitchen for outdoor meals. The other can be used for outdoor sleeping if desired. A third porch adjoins an end bedroom.

The appearance of the exterior bears out the inner purpose of the place and suits the surroundings. The walls are rough vertical boarding white-washed. The roofs of untreated cedar shingles have weathered very dark in color. The outside trim is painted white. By means of solid shutters of natural redwood, the house can be securely closed when not occupied. The compound wall is a further protection from intruders and a great asset to the seclusion people want in their country places.

A study of the plan will reveal the fact that every room has access either to one of the three porches or to the gallery that runs around the inside of the courtyard. The garage is a two car shelter formed in the northeast corner of the compound wall with the house wall as the third enclosure. A toolhouse opens off from it. One can gain access to the garage under cover of the long gallery.

While this plan of a series of rooms strung along in two wings, opening on an outside passageway, would not suit all climates as a year-round plan because of the difficulty of heating it, the lines of the house and its utter lack of pretense are an inspiration to anyone who seeks escape from official cares. I wish there were more houses of which it could as justly be said "Both the actual plan and appearance are not too busy for really simple living."

SWIMMING AND WADING POOLS,
BATHHOUSES AND LOGGIAS

ALONG WITH SUN-BATHING has developed the equally popular and wholesome interest in swimming as a tonic. If there is one modern feature of a home prized above others it is the swimming pool. When you think of the money spent in renting a summer cottage on a distant lake or seaside, and in getting there year after year, you will find a swimming pool on your own property a wise investment. If you have been renting a bath-house or patronizing a beach club, and motoring to it twenty miles or more several days a week, all summer, you will see the advantage of having a pool on the home grounds you and the children can enjoy, without spending time or effort to go somewhere to swim. No one who has a good swimming pool will deny that it yields a return that justifies the cost. For it is costly, just as an automobile is costly.

You can spend hundreds or thousands of dollars on a swimming pool, depending on the size and depth you want, the water supply, the kind of purifying facilities installed, the cost of materials and labor in your locality, and the way the pool is built and finished. One of the justifications is that it is among the few expenditures on a home that, under normal conditions, improves the resale or rental value of your property in proportion to its cost, granted you do not indulge in the most expensive design and de-luxe appurtenances.

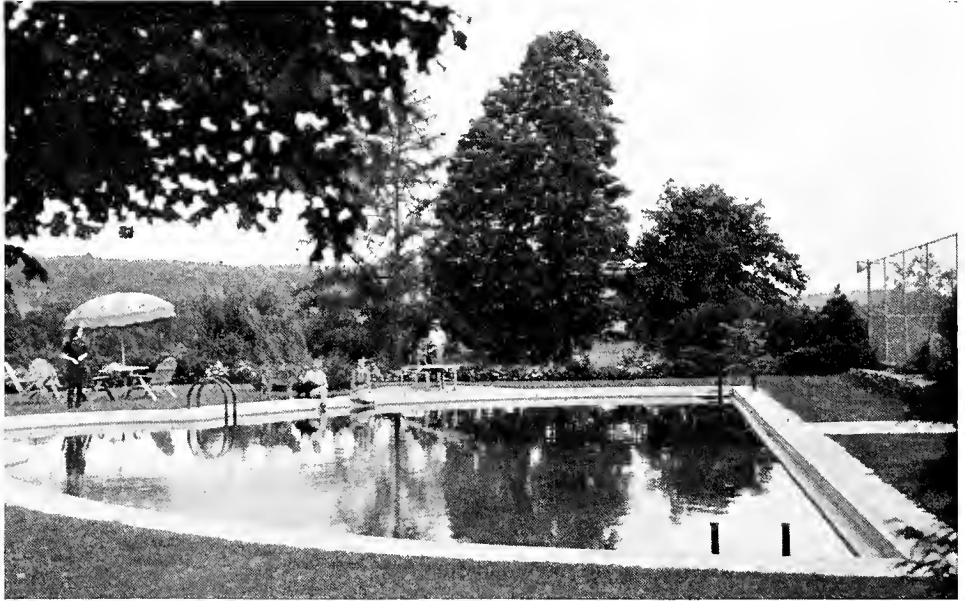
About the worst mistake you can make is to try to build a swimming pool yourself if you have not had engineering or architectural experience.

It is just as bad to casually entrust the job to some contractor whose pools you have not found out to be successful. This may sound like a dogmatic statement but until you look into the many problems involved, you may not realize the absurdity of experimenting with anything as difficult to build, and you may not understand why you need professional help.

These problems include the matter of subsoil and drainage, purification of the water, the planning and construction of concrete walls to suit the depth and water pressure of a given pool so they will be water tight and withstand the inward pressure of the earth when the pool is empty, and the outward pressure of the water when the pool is full, as well as the changes in temperature where winters are severe.

You will want to look into the considerations affecting the cost of your pool, which I can only outline here. There is extensive reading matter available on the subject, including pamphlets furnished by the cement companies, to be had for the asking

THE SHAPE AND DEPTH OF SWIMMING POOLS. The least expensive shape for a cement pool is the rectangle, because the wood forms are simpler and the labor costs of placing reinforcing steel are less. Oval or circular pools cost more than a rectangular pool if the sides are to be vertical, but are economical if built with a dish-shaped bottom, the sides sloping toward a deep center. This type of curved pool, with sloping sides all around, withstands winter pressures best.



141. Lowell Thomas's irregularly shaped swimming pool at Pawling, New York.

Lowell Thomas's swimming pool in Pawling, New York, illustrates this type. It is irregular in shape—one side straight and the others curving—and slopes down from the edge toward the center. See the picture above. It is located near the tennis court, and has bathhouses at one end.

The octangular pool at Bernard Boutet de Monvel's Palm Beach home shown on page 42 has vertical sides. It is 25 feet by 25 feet in size; 7 feet deep at the north side, and 4 feet 3 inches deep at the south side by the steps.

The depth of a rectangular pool has much to do with the cost. For every foot you increase the depth, you are increasing the weight of the water thrust against the sides that must be allowed for by extra reinforcing. This costs more in proportion than when you add a foot to the length or width of your pool, one reason for keeping swimming pools as shallow as possible. If no springboard is to be supplied for diving, a pool is often built only three feet at the shallow end and six feet deep at the deep end. But

most adults like to dive from a springboard. If such a springboard is three and a half feet above water level, the minimum depth to allow is eight feet in the deep section of the pool (that is about four feet from the end where the springboard is located). The bottom of a pool with vertical sides usually slopes gradually from the shallow end of perhaps three and a half feet toward the deepest part.

THE WIDTH AND LENGTH OF POOLS. So much depends on how you want to use the pool. If diving is your hobby, a short pool gives you plenty of chance to indulge in that so long as you have the depth you need. A morning plunge is enough for some. Other families like competitive water sports, and as a lane 5 feet wide is the accepted width for each swimmer, many pools are laid out in multiples of 5 feet as to width. If you are interested in practicing for intercollegiate competitions, the smallest pool recommended is a four lane width of 20 feet by a 60 foot length.

INCIDENTAL CONSIDERATIONS—SCUM GUTTER, STEPS, PATHS, ETC. A carefully built pool has the inlets and outlets located so that water will be circulated and so the pool will empty readily when drained. To take care of overflow caused by swimmers in action and of any surface debris, a scum gutter with drainage outlets is often built in around the pool at the water line. The rolled-over edge of concrete between the pool and gutter is handy to grip when you want a hold while in the water. If you like, you can have a handrail or rope attached just above the water at some points around the pool for swimmers to hold on to and support themselves at the surface of the water without effort. You will want a ladder or steps by which to enter or leave the pool. To prevent anyone slipping, if the steps are cement they can be treated with acid to roughen them slightly or they can be troweled with a wooden float.

It is an advantage to have a cement, stone or board walk leading from the house or bathhouse to the pool and extending around it, so that bathers do not carry grass from the lawn into the pool, which adds debris, and so do not litter the dressing rooms with gravel or grass.

The pleasantest place to lounge around a pool is on grass in the hottest weather, or on seats that do not retain heat as stone does. A spreading tree or shelter on the north side of a pool is a good idea because the area under it is kept from exposure to the sun but it casts no shade on the pool itself. The pavilion of bamboo sketched on page 286 goes around two sides of the swimming pool of Waverly Oaks, shown on page 283, affording welcome shade by day and a delightful place for evening dancing.

LIGHTING THE POOLS AND SPORT AREAS. Pools, badminton courts and game areas in general can have their hours of usefulness increased by adequate

night lighting. The location, intensity and kind of light varies with the different sports so that no general rules can be given. One should study the literature put out by the electric light companies and consult lighting technicians to take advantage of the many kinds of reflectors, the improved equipment and methods available. Conduits for wires should be buried wherever possible, and this means the lighting should be planned before ground layouts are completed. Outlets for lights, that are waterproofed, can be installed at the edges of ponds or pools or near outdoor grills for use on special occasions.

In locating overhead lights around pools, bear in mind that they attract insects which will fall into the pool if the lights are close to it. There are ways of installing underwater lights so they can be serviced without emptying the pool.

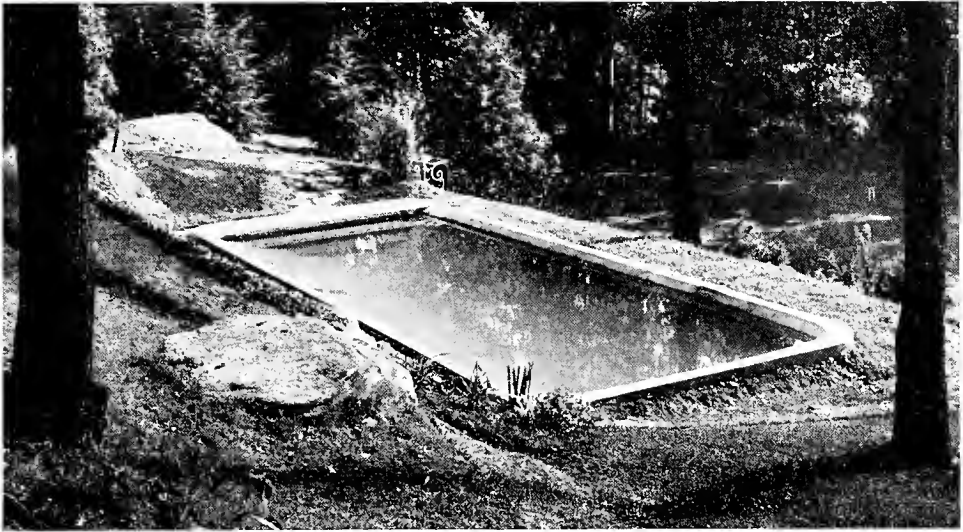
THE CONSTRUCTION AND PROTECTION OF WADING POOLS. While the construction problems connected with wading pools are similar to those that apply to swimming pools, the cost and care are less because they are smaller in size and shallower, seldom over twelve inches deep. The main difficulty is winter protection in climates where there is snow and ice. A shallow pool of stone or concrete is naturally made with less reinforcement and fewer expansion joints than a large swimming pool. In winter, frequent and sudden changes in temperature are apt to split the basin if it is empty. If water can be left in and kept from freezing solid, by logs or planks in it, plus a board covering with straw over it, the temperature of the water is fairly even and the presence of it a protection. A pool with sloping sides is less likely to be affected by winter changes of temperature than one with vertical sides.

In some homes a wading section is incorporated at one end of the swimming pool with a partition between to keep small children from going beyond their depth. Boys and girls can sail their boats as they wade, and derive much pleasure from such a pool. (See page 207.) A series of little pools in a small terrace and yard, as shown in Mr. Eckbo's design on page 117, would fascinate children.

The time comes when children outgrow a wading pool. Parents are wise if they foresee this and plan the wading pool in relation to the garden design, so that its reflective and decorative quality will be an asset, not only while the children are small but in time to come, when water plants and goldfish may be added as part of its interest. The reflecting pool on page 305 illustrates this point.

A CHILDREN'S SWIMMING POOL FOR \$250. There are many home owners with moderate incomes who would never dream of spending \$3000 for a swimming pool but would welcome a chance to have a \$250 pool for

their children, in which they could get a little swimming practice for themselves, now and then. Vincent Bedini, a Connecticut contractor, worked out a concrete pool he could build for that price because of the economy of construction employed in it. The pool has no vertical walls, which means less excavating and less material than for a standard pool. Mr. Bedini achieved a further saving by eliminating the necessity for forms and through the use of light reinforcement. The pool, as shown just below, is 9 feet by 25 feet in dimensions, 4 feet 6 inches at the deep end and 2 feet 6 inches at the shallow end where there are concrete steps.



Courtesy of Portland Cement Co.

142. The children's concrete swimming pool at the home of Dr. A. L. Barach in Ridgefield, Connecticut, designed and built by Vincent Bedini.

"The pool," to quote the contractor, "is built by excavating a V-shaped area with sloping sides pitched inward 30 to 45 degrees from the rim. Cinders 5 to 6 inches deep are then compacted on the sloping sides and on the 2-foot wide floor. A 1:2½:2½ mix of concrete, very stiff, is then shoveled over the sloping sides on the compacted cinders. Hexagonal chicken wire, 16 gauge, 2 x 2 inch mesh, is used as reinforcement. The concrete is placed to a thickness of 3 inches. Then a finish course of 1:2 mortar is placed 1 inch thick. Two screens, built to conform to the sloping sides of the pool are used in shaping the concrete. The concrete finish is roughened with brooms to keep the sides from being slippery. Drains and overflows are installed as in the conventional type pool." The photograph on page 206, taken while the pool was being constructed, shows how the concrete is roughened on the side of the pool before the top course is placed around the edge of the pool. The children's playhouse is in the background.



Courtesy of Portland Cement Co.

143. Construction detail of the children's swimming pool in Ridgefield, Connecticut, showing sloping sides. Contractor, Vincent Bedini.

The pool, of the dimensions described, is not deep enough for diving but is ideal for use by children. It would afford adults more space for swimming if the central floor shown in the photograph were to be 4 feet wider. The total cost of the pool thus widened would be \$400 if the type of ground for excavating, the drainage facilities and other conditions governing the cost were not unusual.

POOLS CAN BE BEAUTIFUL AND PRACTICAL AT THE SAME TIME. The English home pictured on page 196 has a concrete swimming pool built around the curve of an established clump of rhododendrons, creating an unusual shape (see page 207) and serving to reflect the shrubbery as well as to afford recreation. A shallow wading pool with a fountain jet in it is divided from the main pool by a bridge of paving under which floodlights are concealed. Beyond the pool the lawn ends in a rough meadow planted with narcissus and fringed by English gorse. Too often our pools are practical as places to swim, and that is all, whereas with a landscape architect's help, without undue expense they could just as well be designed, located and featured to add to the beauty of the landscape at the same time.

The landscape architect, Fletcher Steele, for instance, always introduces the fresh water to a swimming pool by means of a fountain, which adds much to the beauty of the pool. Also he makes use of the overflow through

runnels or canals which help irrigate the garden or add to the landscape scheme of the grounds.



144. Swimming pool and wading pool in an English home at Chertsey, Surrey. Landscape architect, Christopher Tunnard.

LOOKING DOWN ON THE SWIMMING POOL. Wherever a swimming pool can be situated so one looks down on it from a terrace or porch or balcony above it, the design as a whole, with the surrounding landscaping, adds greatly to the aesthetic enjoyment of the pool. A variation of levels is one of the recipes for interest in any landscaping design, and never more effective than when it is water with its reflecting quality that one sees below. In the Wolcott Blair home in Palm Beach, the oval-shaped pool is situated on a level below the broad terrace on which the house is built. (See page 208.) The two flights of steps leading down to it are made a decorative feature by the lacy wrought-ironwork.

A shady loggia with triple arches across the front supplements the wide margin at the end of the pool, paved with quarry keystone as a lounging area. The shrubbery and palms are kept to the minimum because leaves falling into a pool are a nuisance; but some planting is essential.

A sunny, open terrace larger than all the interior living space is the vantage point for the fan-shaped pool 48 feet long and 18 feet wide in the Herbert Stothart home pictured on page 208. Here the pool is almost three feet below the floor of the terrace, with a retaining wall of concrete carried around the circular portion as a low balustrade. A temporary metal

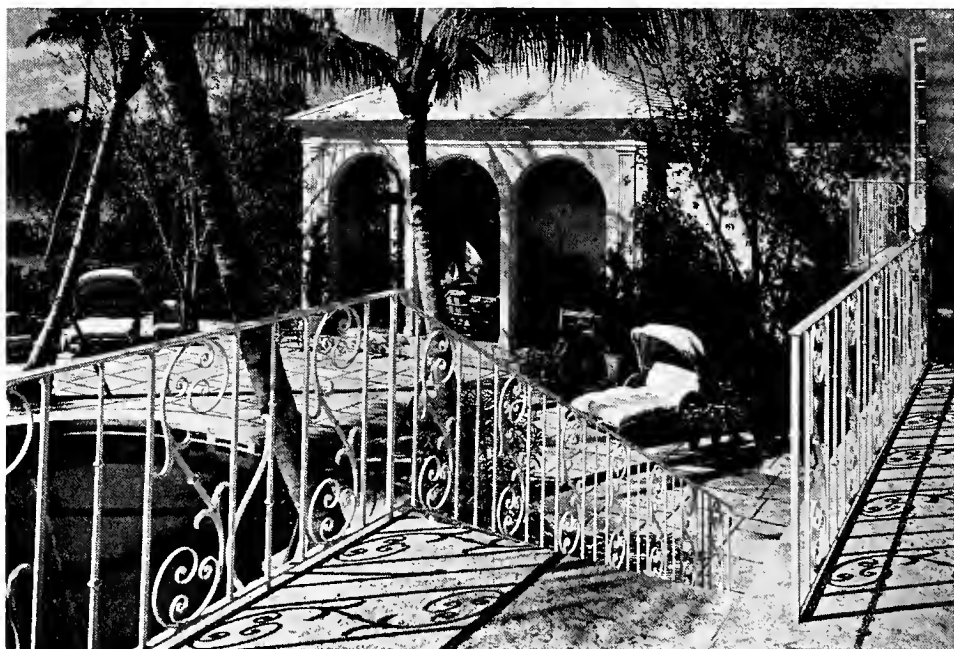


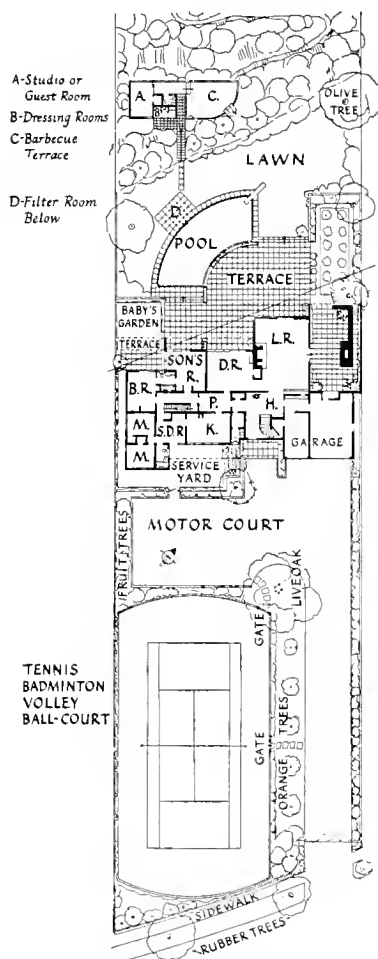
Photo by Samuel H. Gottscho.

145. Pool and loggia at the Wolcott Blair home in Palm Beach, Florida. Architects, Treanor and Fatio.



146. Fan-shaped pool at the home of Herbert Stothart in Santa Monica, California, designed by J. R. Davidson.

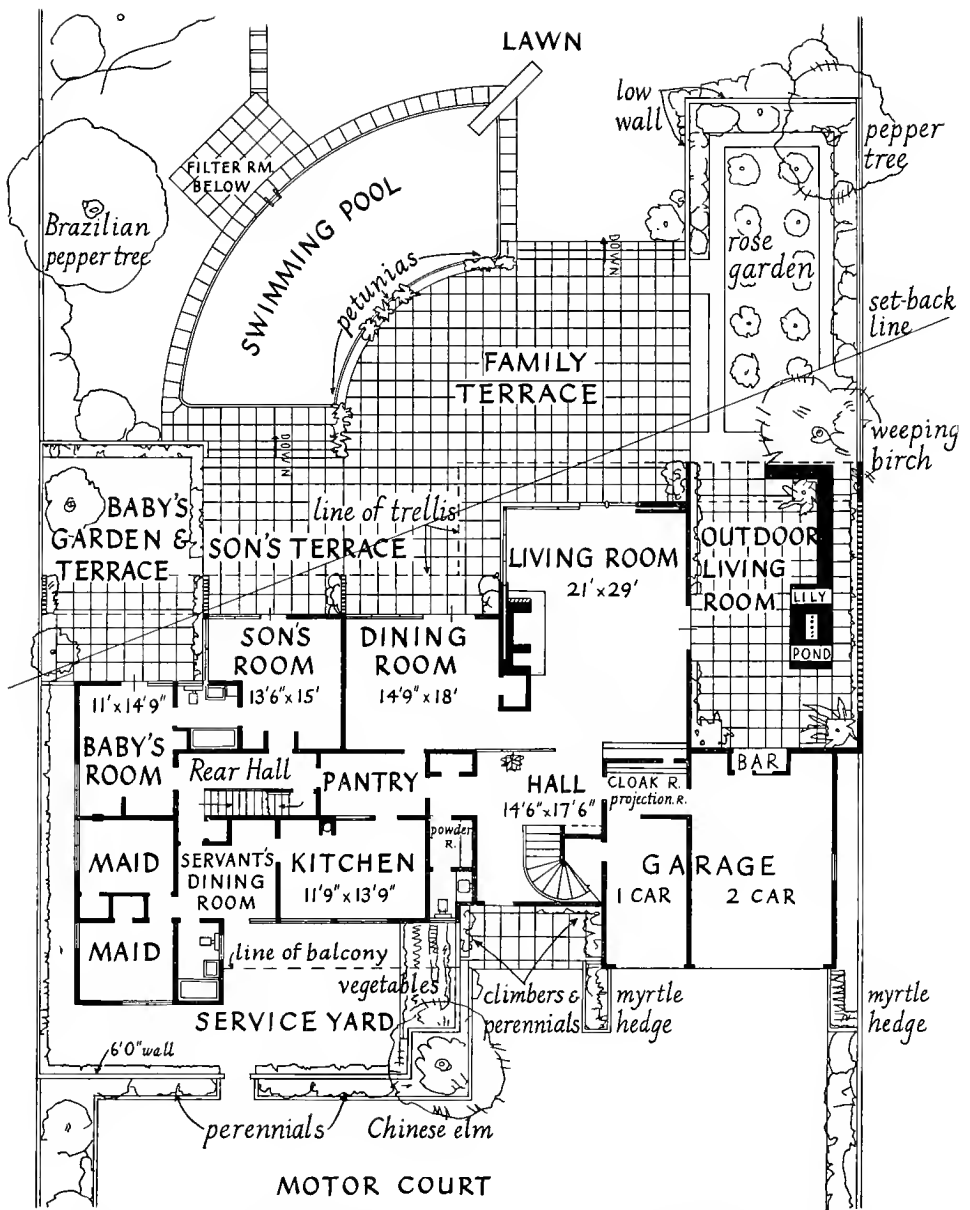
fence around the rest of the pool keeps young children from falling in. Note the springboard in the corner away from the terrace where the pool is deepest.



147. Plot plan of the Herbert Stothart home in Santa Monica, California, designed by J. R. Davidson.

The scum gutter in this pool is of blue ceramic tile, and the broad walk around the pool of cement blocks. The ladder is placed at a point where the walk opens back into a square paved sitting space for sun-bathing built over the filter room.

A glance at the layout for the Stothart grounds shown above will reveal what thought has gone into the location of the interior and exterior living areas. The property is an unusually long strip but only 95 feet wide, almost the width of the house if you count the garage and the outdoor living room as part of it. The house has been located midway between



148. Plan of Herbert Stothart house and pool in Santa Monica, California, designed by J. R. Davidson.

the road and the rear boundary line above a slope, and has been planned with all the living rooms toward the view at the rear and with the service wing toward the road. See the detailed plan of the house on page 210. In the passageway from the garage to the hall, note the space for a moving picture camera, with an opening for the projector to throw pictures onto a screen at the far end of the living room. As the owner is the musical director for one of the large moving picture companies, the living room is planned to take care of this professional interest. The outdoor living room is described on page 296.

In locating the other outdoor areas, the designer has put the tennis court, the least decorative of them, in the space next the drive between the road and the house and screened it by a pittosporum hedge, orange trees and a large live oak. That leaves the space adjoining the living rooms of the house for the terraces and fan-shaped pool. A third unit of outdoor living is provided at a little distance below the swimming pool, in a place secluded and enhanced by flowering shrubs and trees. Here the studio dressing rooms and barbecue with the large dining terrace next it have been combined as an objective away from the house that serves several recreational needs. Steps lead toward it.

MAKING THE SWIMMING POOL UNIT LIVABLE. The feeling of intimacy and seclusion which we associate with an indoor room can be carried out in the swimming pool as a single unit of living space, by various methods. One is the situation on a lower level, as described, which gives it a retaining wall against one side. Another is the way it is enclosed. The Frelinghuysen pool at Palm Beach is enclosed by shrubs and hedges except at the entrance from the patio under an arch cut in the hedge. The pool of Alfred E. Lyon near Stamford, Connecticut, shown on page 212, is built into the rocky slope below the house on a terrace leveled off to accommodate it. It has a uniform depth of 5½ feet, and is fed by fresh water daily, pumped in from an artesian well that supplies all the outdoor needs on the place. The overflow is used to water the garden. Its interesting shape is due to the fact that on one side the pool follows the contours of the ground and is backed by a curving concrete wall and a stone wall above it to take care of landslides and drainage. The outside edge of the pool is straight and has a wooden lounging platform built out over the slope below, guarded by a metal rail from which one looks down over the drop-off to a level several feet below the pool. The end paved with flagstones for chairs, table and divan adjoins a rose garden and path up to the house.

In the George Cukor home, the pool, pictured on page 143, with its terraces and grill, makes a large but definite unit of space with the lawn

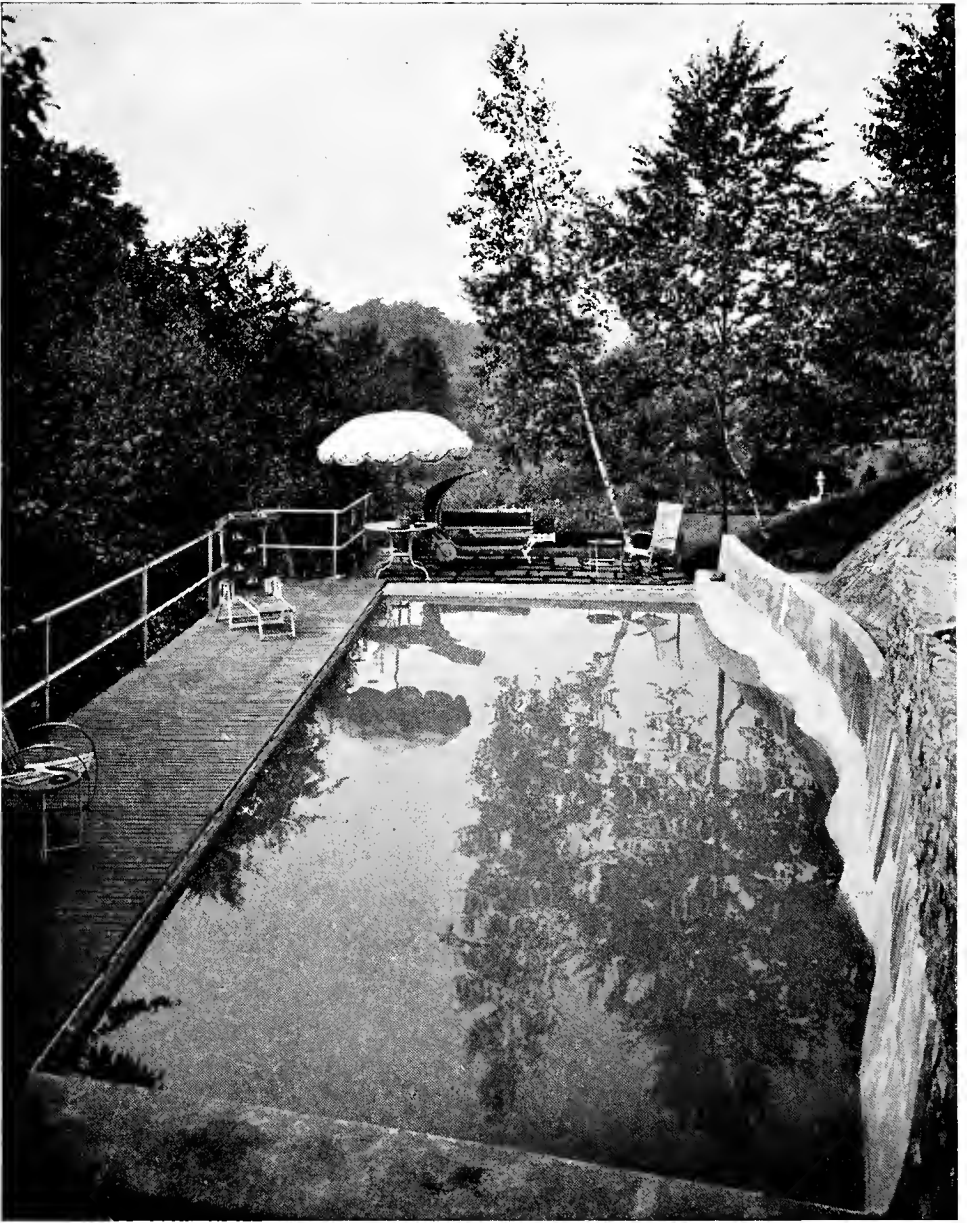


Photo by Richard Averill Smith.

149. Swimming pool at the Alfred E. Lyon home near
Stamford, Connecticut.

on one side, the street below walled off from view and the terraced garden adjoining it.

CONSIDER THE SETTING. The setting for a pool calls for the same professional skill as the construction, if you do not want your pool to look lost in a great expanse of lawn. Without losing the outdoor feeling or the chance for sun to warm the pool, you can do much to humanize the setting for it. Planting and enclosures are part of this design element. The structures you erect near it are the other factors that help make the pool a livable place.



Photo by Richard Averill Smith.

150. Victorian bathhouse at the Charles MacArthur home in Nyack, New York. Landscape architect, Mary Deputy Lamson.

More and more dressing rooms and showers are designed and equipped with some facilities for entertainment of an informal nature. The lazy, relaxed feeling that follows a good swim calls for places to sit in the sun and partake of refreshments in view of the water. If you have just a paved terrace between the showerhouse and the pool and equip it with chairs and a table with an umbrella over it, you have set the stage for a living center that will vastly increase the pleasure your pool affords.

A VICTORIAN BATHHOUSE FOR HELEN HAYES. The actress Helen Hayes, who is in private life Mrs. Charles MacArthur, lives with her husband and



Photo by Richard Averill Smith.

151. Bathhouses and pool at the Howard Cullman farm near Purchase, New York. Landscape architect, Marianne Dean; architect, Aymar Embury II.

children in a house at Nyack, New York, as Victorian as anything could be that was built in the lifetime of the queen she has portrayed so amazingly well. But it has all manner of amusing modern devices to make life enjoyable. The delightfully designed bathhouse to the right of the pool, was suggested more or less by a little schoolhouse in Dutchess County, a section of New York State where you will find many old Victorian buildings of the best 1840 "cottage Gothic" design, with just enough scroll work to be interesting, and no real gingerbread. This bathhouse, shown on page 213, has dressing rooms and showers for men and women. In the basement is housed the filter plant for the pool. The exterior is of the board and batten construction favored in the nineteenth century, with a bell-shaped copper roof. Outside is the stone paving with a millstone set into it, under the table, as the focal point. This table is made of an old ship's wheel, with a top of clear glass fitted in. The base also is from the ship. The chairs are of natural colored wood kept oiled. Other details of the landscaping are described on page 269 and shown on page 271.

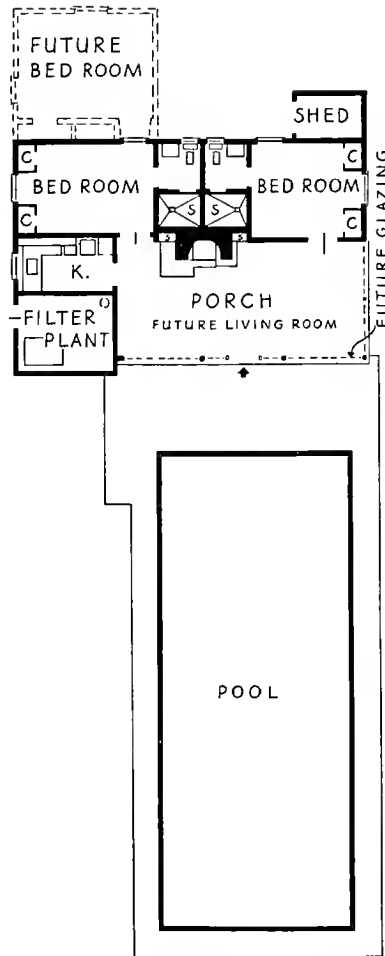


Photo by Rowe Rader.

152. Eugene Forde's pool house near Los Angeles, California.
Architect, Allen G. Siple.

A PERGOLA BETWEEN BATHHOUSES. In the Howard Cullman farm near Purchase, New York, the pool designed by Marianne Dean, the landscape architect, is situated with trees and a hemlock hedge as a background on one side, lawns on two sides and an architectural structure at the spring-board end which merits attention. The architect, Aymar Embury II, designed two small square brick bathhouses, painted white, with copper roofs

flared out from a finial in Chinese pagoda style, and connected them with a latticed pergola shaded by climbing roses where cool drinks and picnic suppers can be served. See the photograph on page 214.



153. Plan of Eugene Forde's pool house, designed by Allen G. Siple.

A CALIFORNIA POOL HOUSE FOR SIMPLE LIVING. New words have to be invented these days to fit the new facilities for outdoor living that are being designed. Instead of the old-fashioned way of laying out grounds, with so many separate units of gardens, summerhouses, pools and so on, we tend to organize them for more efficient use. Thus the architect, Allen Siple, has combined dressing rooms, guesthouse and living porch in one simple building (see page 215), built of redwood and roofed with handsplit red cedar stakes, next the pool at the home of Eugene Forde, near Los

Angeles. By studying the plan on page 216 you will see that the future developments would make this a complete little cottage, and perhaps stimulate home owners in many localities to build something of the sort for week-end and summer homes, starting with the pool and the two bedrooms, each with showers, the kitchen and utility room with the living porch as the center, to be glassed-in later. The porch and walk around the pool are paved with slate.



Photo by Mattie E. Hewitt.

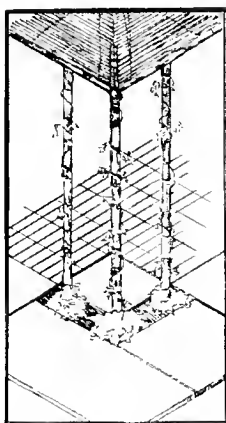
154. Pond and icehouse at the home of Marguerite Jordan, North Stamford, Connecticut. Landscape architect, Stanley Underhill.

The pool here is 20 feet by 50 feet, and the pool house 24 feet by 37 feet, not including the shed which is used for the storage of garden tools. The bedrooms here are used as dressing rooms as well as for week-end guests. The kitchen serves as a bar and also for a commissary department for cold snacks. It is entered from the porch by a Dutch door which gives the effect of a bar when the upper portion of the door is open. The equipment room houses the filter and pump serving the pool, but in the east could also be planned to house a heating unit, and so make the cottage usable all the year.

A POND AND ICEHOUSE ADAPTED FOR SWIMMING. The picture above may seem far removed from metropolitan centers but is actually only an

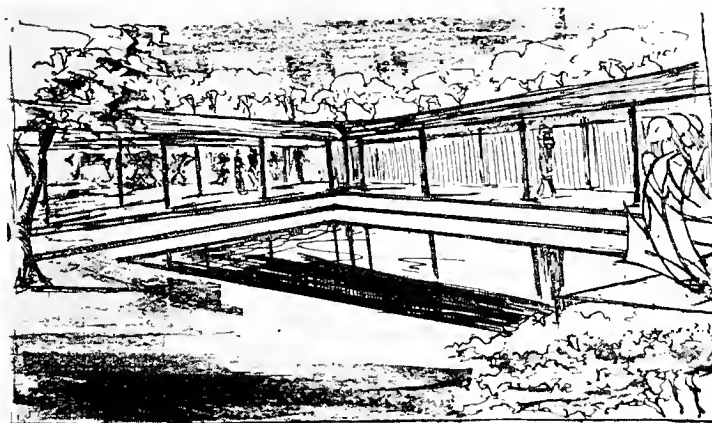
hour's drive from New York City, in North Stamford. On the property, now fittingly called Deepwood, there was a natural pond fed by a brook and springs from which the former owners used to cut ice, storing it in a well-insulated old icehouse at the lower end of the pond. When Miss Marguerite Jordan, the present owner, built her summer cottage above the pond, she began to see what she could do to increase the recreational advantages of this pond. It was too shallow for swimming so she had a steam shovel come for two days and scoop out the gravel bottom, making the water 9 feet deep at the springboard end and an average of 4½ feet in the rest of the area shown in the picture on page 217. The sand and gravel scooped out was used as fill around the icehouse and the side of the pond shown in the foreground of the picture with top soil added so grass could be grown on it. Fortunately the pond had a natural gravel bottom, so cement was not necessary except as a facing for the stone dam.

The dam at the overflow end of the pond is curved and built of stone laid in concrete and faced with several inches of concrete. A spillway was left half-way across the dam, affording natural drainage. Every third year, in August, the pool is allowed to drain as much as it will and the balance is pumped dry and the silt that accumulates in the bottom is bailed out in buckets. Over the spillway a split log is laid like a bridge, and a bench of logs with a back is built over one side of it. It makes a fine place to sit in the sun and serves as a guard to keep one from falling in as one crosses the sluiceway. The icehouse of cedar shingles had an addition built at each side by bringing down the roof. Inside are two dressing rooms, a kitchen as efficient as a ship's galley and a bunkroom for overnight guests. The plans call for a living porch to be built out at the back toward the south. An electric outlet has been installed under a shingle for night lighting.



155. Detail of the bamboo pavilion for the swimming pool at Waverly Oaks, Massachusetts, designed by Daniel Urban Kiley.

A BAMBOO PAVILION AROUND TWO SIDES OF A POOL. To the north and west of the 20 by 40 foot swimming pool at Waverly Oaks, Massachusetts, the landscape architect has designed a pavilion of bamboo which with the pool terminates the recreation area beyond the game lawn. See page 219. The plan on page 283 shows this structure around the pool to be of generous size, for large scale entertaining. The floor is of red brick with a deep purple flagstone border. The heavy posts of bamboo that support the roof have steel rods through the center. (See the sketch on page 219.) The roof has a bamboo frame overlaid with bamboo screen and could be completely removed for the winter in climates that makes this necessary. Cherry trees are planted outside the pavilion toward the boundary line. The outlook from the shelter to the west is into a sand garden. The open outlook from the pool is toward the sylvan glade and the house across the game lawn. It is a structure both useful and decidedly effective in the landscape. The whole plan is discussed in detail on pages 284 and 285.



156. The bamboo pavilion for the swimming pool at Waverly Oaks, Massachusetts. Landscape architect, Daniel Urban Kiley.

THE POOL AS PART OF THE HOUSE. The devotees of swimming have as their dream pool one they can reach at one jump from their bedrooms for a morning or evening dip. These dreams have come true in some of the new houses.

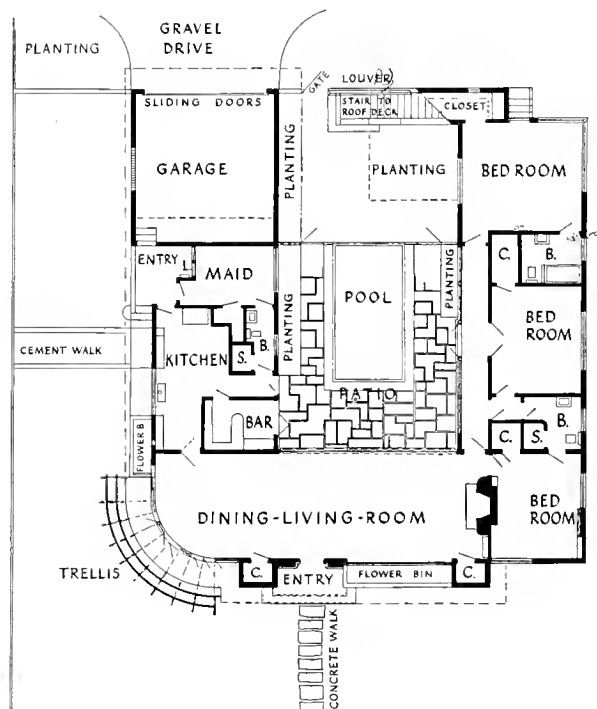
In the modern house for year-round living, designed by the architects Poletivzky and Russell for Ernest M. Reinhold in Coral Gables, Florida, the patio already mentioned on page 8 is in two sections, an outer patio of shrubs and vines and an inner completely screened section devoted to a swimming pool. (See page 220.) The living room painted lemon yellow,



Photo by Ernest Graham.

157. Swimming pool in the patio at the home of Ernest M. Reinhold, Coral Gables, Florida. Architects, Polevitzky and Russell.

with blond mahogany furnishings, opens off the swimming pool by folding glass doors which can be closed in chilly weather. When open, the patio with its pale gray walls and white trim is part of the living room, and repeats the yellow of the living room in yellow waterproof fabrics on the furnishings. The supplementary color is aquamarine, used also in coverings and as a color for the tiles lining the oblong pool. It is not so very large—about 9 feet wide by 18 feet long—but it is accessible from every part of the house, from the three bedrooms, as shown in the plan on page 221, by



158. Plan of the Ernest M. Reinhold home in Coral Gables, Florida. Architects, Polevitzky and Russell.

means of a corridor opening onto it, from the living room and dining room, and from the bar and kitchen on the side across from the bedrooms. A bold, exciting fretwork design, more effective than a carpet, is shown as the edging of the pool, made up of slabs of concrete set in about four inches apart, in contrast to the Bermuda grass growing between. There is no awning over the patio. As Mr. Russell explains, "The patio is covered with monel screening on a steel frame, hence its transparency and lightness. The protection from sun and rain in the patio is given by a five-foot

cantilevered slab over the folding doors. You see, outdoor living is very desirable in Florida and sun-bathing is a popular recreation, provided one is protected from insects. We use monel screen because it does not have the green tarnish that comes on copper and would discolor the walls of the pool and the building."

OUTDOOR GRILLS, DINING AREAS, RETREATS

THE OUTDOOR GRILL is something we can have a great deal of fun in working out ourselves. It is not the complicated business that building a swimming pool is. As I look over the material on dining al fresco, I realize how delightfully varied are these features, how unconditioned by the attempt to copy. They have been undertaken as creative ventures for special needs and locations, utilizing whatever materials were available.

THE FIREPLACE ON THE SCREENED PORCH. If I had a screened porch here in New England, I would certainly put a fireplace on it, for two reasons—to take off the chill in spring and fall and on summer evenings, so I could get more use of it, and to make it possible to cook and eat out-of-doors at any hour in hot weather, regardless of mosquitoes, June bugs, flies and wasps. They are the deterrent in many unroofed outdoor dining terraces, especially after sunset in summer. The photograph on page 55 shows a screened porch in a Florida home with a corner fireplace. It gets year-round use because even on chilly winter days the fire keeps it livable. The grill is used for many delicacies, such as freshly caught fish, yams, and cornbread. There is an iron door in front of the brick firebox, and at the left, as the photograph shows, a place to rest a broiler in a vertical position so that a steak cooks on both sides at once. Tile is used for the grill top and for the top of the cupboard at the left of the fireplace in which fuel for the grill can be kept. Note the all-important matter of the height of the grill.

THREE REQUISITES FOR AN OUTDOOR GRILL. If there is one item to toot horns and beat drums for, it is a cooking surface like this one, high enough so that one can use it without stooping. Mediterranean countries have for centuries built this type. Our manufacturers have at last got around to design kitchen sinks and kitchen stoves 34 or 36 inches high, but the average outdoor grill is still built too low for comfort. (And the bathroom lavatory in which we wash our hands, I might add irrelevantly, is seldom high enough from the floor for adults to use without hunching over.)

The grill in the Balboa Island backyard shown on page 97 has a cooking surface of convenient height. So has the stone fireplace in a corner of the retaining wall at the lakeside home in Oregon pictured on page 326.

When you are going to the trouble of building a grill, build one large enough for your needs. A cooking surface that will accommodate the large containers you need when you entertain a group of a dozen people, en-

abling you to prepare the meat, the vegetables and the coffee over it, should be about 30 inches one way by 16 the other. Bear in mind when you plan your grill that outdoor meals are seldom solitary in relation to a home! Hospitality can be demonstrated in no better way than in inviting friends to share your *al fresco* cooking which has an extra flavor eaten under the sky with woodsmoke in the air.

Woodsmoke is all very well as a gentle aroma but not when it puffs out from the fire into your eyes. To avoid this, locate the grill so that prevailing winds will carry both fumes and smoke away from where your guests are seated and away from your position in front of the grill.

AN INGENIOUS GRILL FOR A PATIO. In the sketch shown on page 121, the combination fireplace and grill is in a corner formed by the rear wall of a patio and a short wall built out at right angles to it. Smoke is carried up the chimney flue in the corner and back over the rear wall. A copper hood projects 2 feet and 10 inches over the cooking area and causes cooking odors to be drawn into the flue and out. See the plan and section drawing of this efficient grill on page 225. The top is 30 inches off the ground. A brick table of the same height extends at each side of the grill built as the top of a brick shell with a dirt fill. Each work table is 2 feet wide and 5 feet long. Those who are on the lookout for well-planned arrangements of a simple, practical nature to improve their outdoor fireplace would do well to integrate similar service tables into their structures.

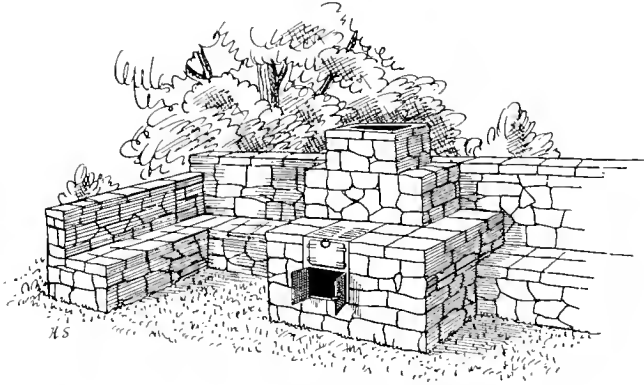
You will discover on the diagram that the firebox for the grill is about a foot in front of the corner. This leaves space for a triangular plate of heavy iron riveted to the bottom of the flue, just right for the coffee pot or tea kettle to fit on. The grill-top is 3 feet wide by 20 inches from front to back, ample for cooking several things at once in large containers. The top is hinged and can be swung up against the chimney flue when the fire is laid. The firebox for charcoal is of heavy cast iron, perforated for draft on the sides and bottom. It is insulated by a course of firebricks and asbestos plate at the front from the outer course of ordinary bricks.

PRIMITIVE GRILLS. The most primitive grills have no chimneys. For years my outdoor grill fed by wood has functioned well with only an upright flat-faced stone slab at the back, rising fourteen inches higher than the grill-top, to direct the smoke up and away from the terrace in front of the grill. The sides are huge blocks of native stone, over twenty-six inches long, fairly level on top, laid at right angles to the back slab on a base of sand and stones, with a space eighteen inches across for the grate to span.

The primitive grill is, in my opinion, an eyesore if it is constructed of round cobble stones set into thick mortar, like raisins in dough. I have no aversion to mortar used with discretion in limited amounts to strengthen

stonework, and I realize it is necessary in making an outdoor chimney. The chimney is a help when there are strong winds. But it does not have to be thickly plastered with mortar, nor does it have to be awkward and ugly to be practical. Often the shelves to set dishes on that can be built into a chimney breast give meaning to the design and a reason for carrying the flue higher than the foot or more that would be absolutely necessary above the cooking top. See the sketch below.

I build my fire on the stone base at ground level, but many use a cast iron grate about four inches off the ground to improve the draft.



160. Sketch of fireplace built around a cast-iron unit for either wood or charcoal, manufactured by Hancock Iron Works.

READY-MADE FIREPLACE UNITS AND GRIDS. There are several cast iron fireplace units on the market around which to build the masonry enclosure. The sketch above shows one intended for either wood or charcoal. You can buy units just for charcoal. They are all planned to allow for broiling and slow cooking, and have a door across the front of the ash-pit to control the draft. Wrought iron is never practicable for the grate in a firebox as the heat of the fire would make it give, but it could be used for the grill-top.

One can buy a ready made grid of cast iron for the cooking surface and another for the fire and have three edges of them set into the masonry with the fourth broad side toward the front. Or one can have a cooking grate made by a local blacksmith to hang on a cross bar set into the masonry, so that one can swing it up out of the way, when one wants just the heat of an open fire. You can use firebricks like andirons to lay sticks of wood across. Some connoisseurs prefer a flat stone to cook on. It makes fried fish or hash a dish fit for a king. But as it takes time to heat the stone through sufficiently for use, it is wise to be able to change to an iron grate for ordinary occasions.

THE MATERIALS. In building your outdoor grill, stick to a material you have used somewhere else on the place. Stones, when the local setting abounds in stones, make the most appropriate material; but brick, cinder blocks, concrete and other materials may tie into your location and other architectural features better.

The firebox is usually lined with firebricks or tile, since they are indestructible if protected in winter. Fire does not affect them because they have already been baked at intense heat, whereas stones, even large boulders, will in time split. Despite that fact, I prefer them in a primitive setting and for use in a primitive method of cooking. A split stone can be replaced.

Indestructibility in itself is no substitute for beauty. Good designers can do wonderful things with machine-made materials like ordinary cinder blocks; but amateurs do well to use materials like stones, if available, which have the natural interest of varied textures, shapes, colors and sizes to contribute as a harmonizing element to a natural outdoor setting.

Brick is the material used for the fireplace and wall around one part of the dance floor shown on page 186. It was consistent to use it here because the main house and the walls around the place are of brick. Here the descending levels of the brickwork make it relate well to the low hedge that helps partition off this feature of the grounds. What appealed to me most when I saw the grill were the hobs at each side of the fireplace to set hot dishes on, and the low benches of brick to sit on around the fire, all tied into the fireplace unit.

THE FIREPLACE AS PART OF A UNIT. So far as design is concerned, the most effective fireplaces are not isolated in a setting but related to walls or to structural elements in a way that makes them part of a unit. The one sketched on page 226 shows how a stone fireplace is built with stone seats on either side against a retaining wall, with shelf space for dishes at one side of it. The fireplaces in this chapter on pages 228, 229, 231, 233 and 234 are combined or united with structural elements. Study also the fireplace on page 192, which has wood storage space next it and is built into the wall of the play court.

In the picture shown on page 340, you find the outdoor fireplace of the simple North Carolina home built on the outside of the main chimney of the house with its own opening and flue. The wall of the house backs this side of the terrace, giving the roomlike effect to the area which we like, even though we do not expect an outdoor grill to have walls all around it, all of the same height like a dining room. Here, there is a cupboard built out next the fireplace which can be used to keep wood dry for outdoor use and as storage space for the primitive cooking utensils that may be



Photo by George H. Davis Studio.

161. The brick fireplace in the home of
Corinne Loomis in Duxbury, Massachusetts.

needed in preparing a meal. Note the old lantern fitted with electricity to light the fireplace after dark. The hearth is raised for convenience in cooking. The kettle suspended from the crane means business. From low stools one can watch the food cooking.

The fireplace near the swimming pool at George Cukor's house shown on page 143 is built into the wall that encloses the terrace and secludes it from the view of passers-by in the street beyond.

The picture on page 228 illustrates the charm of a fireplace combined with a wall, in a Duxbury, Massachusetts, home. The top of the chimney is on a line with the top of the high wall which extends about eight feet in a curve at each side of the fireplace. There is a small informal garden adjoining the brick-paved terrace where the table and chairs are set. It has seclusion, which is so necessary to any outdoor dining area. The ivy on the fireplace and the closeness to the flower garden and the nearby trees make it an ideal living spot.



Photo by Mott Studios.

162. Barbecue and terrace in the home of J. E. French, at Palm Springs, California. Architect, Charles O. Matcham.

While one could broil meat over the coals here, the fireplace is not primarily to cook over but to make the place cozy on chilly mornings or evenings. Its simplicity is its attraction.

BARBECUE AT PALM SPRINGS. Palm Springs in California is a winter resort where every effort is made to court the sun in the houses built for informal entertaining there. The barbecue patio shown on page 229 designed by the architect Charles O. Matcham has many features that would be an asset in very different climates. It is walled for seclusion with bricks painted cream white like the house. We might have to have the brickwork pierced or opened up by lattice for air circulation in our Eastern summers, but the idea of making the wall high enough to seclude the area is excellent.

The chimney has an interesting turret-like cap and is well designed as part of the wall. Note how the cooking height is made convenient here by raising the level of the fireplace opening above the terrace flagging. The step gained in this way continues as a low seat at the sides, and is thus doubly useful. Next the chimney breast another higher shelf of bricks for dishes and decorative trays breaks up the expanse of brickwork.

The picture was taken before the acacias and other trees planted inside the barbecue walls had attained a height that would provide shade. Time will give stature to them and to the olives, greasewood and eucalyptus trees that have been planted outside the wall. The surrounding mountains of igneous rock provide a magnificent outlook. The colors of the rocks suggest the colors of autumn foliage in the East—mauve browns, oak bronze, against the blue and purple horizon. The sands are pinkish tan, and the desert shrubbery pale yellow and gray-green. The colorful setting is reflected in the furniture of the terrace, natural wood with terracotta cushions trimmed in yellow and green. Because this barbecue terrace opens off the bedroom wing, it makes a glorious place for morning sun-bathing and breakfast coffee.

THE FIREPLACE IN A COURTYARD. An old hay barn in the outskirts of Greenwich, Connecticut, has been converted into guest or week-end living quarters. In the secluded paved courtyard outside the living room, enclosed partly by the former barn and by the woodshed wing added to it, cooking and dining *al fresco* is made a delightful part of the summer program by means of the unusual outdoor furnishings and the unusual fireplace of stones taken from the place. I had never realized how much individuality could be expressed in fireplaces until I had a group to compare.

The photograph on page 231 deserves more than a glance. Note the varied tones and shapes of the stone in this fireplace, the way the mortar is reduced to the minimum and the face of the stones evened off—all indications of excellent workmanship. Add to this the fine proportions and the setting, and you have a combination you would go far to find equaled. There is reason for the design of this fireplace.

The chimney rises high because height is necessary to get a draft inside

the courtyard, since the buildings cut off wind. But the chimney is well designed as a square shaft, rising at the right of a broad grill-top raised to a convenient height for cooking. There are two removable grates so that either wood or charcoal can be used for cooking. There is a sloping flue from the fuel chamber to the chimney shaft at the right of it. In the opening below the cooking top a wood fire can be built. The large cubby-hole below the chimney shaft is for pots or wood storage. The flat stones that surround the grill extend all around the chimney, providing ample service space and also adding to the appearance of the whole unit.



Photo by Ralph Bailey, courtesy of House Beautiful.

163. The stone fireplace and grill in the courtyard at the home of Stafford Hendrix near Greenwich, Connecticut.

The trestle table seats a large party and has benches made of half logs, with the flat side hand-adzed. The candlesticks and copper utensil used for a flower holder on the table are in keeping with the simplicity of the setting. The house helps shade the dining table during hot afternoons, and reduces the glare from a wide expanse of sky.

THE FIREPLACE IN AN ARBOR. Where do you like your outdoor meals to be cooked and eaten? Some people build their fireplace on the porch, some on the terrace, some in a patio, some in a natural setting of trees, and some, as you will note in the photographs on pages 179 and 215, in the shaded

loggia beside a swimming pool. The arbor at a little distance from the house is also a splendid place for a fireplace, because it offers a shaded, secluded area open to natural beauty. Any such objective you provide away from the house takes you out into the grounds and gives you a change in scenery which in itself is a relaxation. Mr. and Mrs. Wilbur Grimm in Middlebourne, West Virginia, have a large old-fashioned house, with a front porch too near the street for privacy. So they decided to expand their outdoor living areas in the direction of the backyard. On the same level with their house in the rear is a magnolia tree which insures shade all summer. Under it they developed a terrace around an old well which they have built up with the same flat, almost shale-like native stones they used for the rounded columns of their arbor and for the fireplace. Below this terrace, down stone steps and a slope, they located the fireplace center with the woods as the background. Nothing could be simpler than the grape arbor. Native stones for the pillars and fireplace at one end have been laid without any mortar visible. The cross timbers overhead are two by fours.

Trees, vines, stones, earth, fire and sky—these elemental things have power to stir us deeply if we can combine them in our outdoor setting, so we get their full value. To do this calls for strength, simplicity and restraint both in our designs and in our handling of natural materials.

A FIREPLACE HEWN FROM A ROCK. From Spokane, Washington, comes the most rugged of the fireplaces assembled here. (See page 233.) The scene is not, as you might suppose, off in some wild mountainous region, but in the city, a hillside slope given to native ponderosa pines and volcanic rocks known as basalt, some quite porous and some very solid but all presenting an irregular, rugged appearance, dark grayish-black in color. The owners, Mr. and Mrs. W. W. Trumbull tell me: "The fireplace was hewn from one of these basalt 'haystacks.' The hearth, chimney and seats were added, all the work of our own hands which has added to our interest and pleasure." The chimney of rough stones appears at the left of the huge existing rock from which the fireplace was hewn, but is hardly noticed against the rocky hillside behind it. The shrubs at each side of the fireplace are *philadelphus Virginalis*. The sumac is a cultivated variety, not a native. On page 316 you will find further details of this unusual hillside which has deployed the owners to outdoor living.

SPECIAL TECHNIQUE FOR CONNOISSEURS. Cooking out-of-doors may seem a return to the primitive but it calls for skill. The connoisseurs know the difference in the technique and the kind of fire required for roasting, broiling, frying, baking. They know it takes time to build up a hot enough fire of hardwood to heat a flat stone on which to fry fish, hash and the like. They know the roasting of a chicken on a spit in front of a fire calls



Photo by A. Lacey.

164. Outdoor fireplace at the home of W. W. Trumbull in Spokane, Washington.

for sustained heat from a large fire and a bed of coals and is a lengthy affair. They know how to cook potatoes and corn pones in the ashes. They know broiling is best over a charcoal fire.

If you have done any of these things, you will have your own notions of how to construct your fireplace and grill. Or without a fireplace you may adapt a metal wheelbarrow to your need, filling the basin with sand until you have the level you want as a base for charcoal under a grill. There is a readymade grill wagon on wheels for outdoor use based on the idea of a wheelbarrow, easy to move about, with a cone shaped grill at the end and a compartment in front which can be used to carry equipment and as a warming oven after the fire is started. It has a spit for roasting and a wick by which to start the fire without kindling, if it is dipped in oil or gasoline.

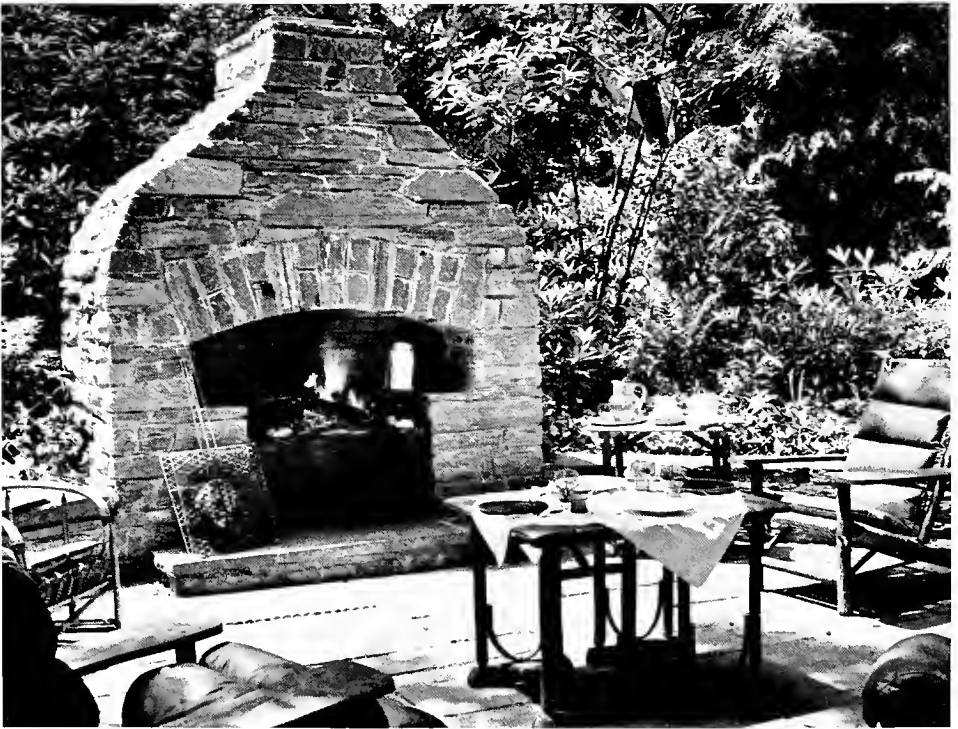
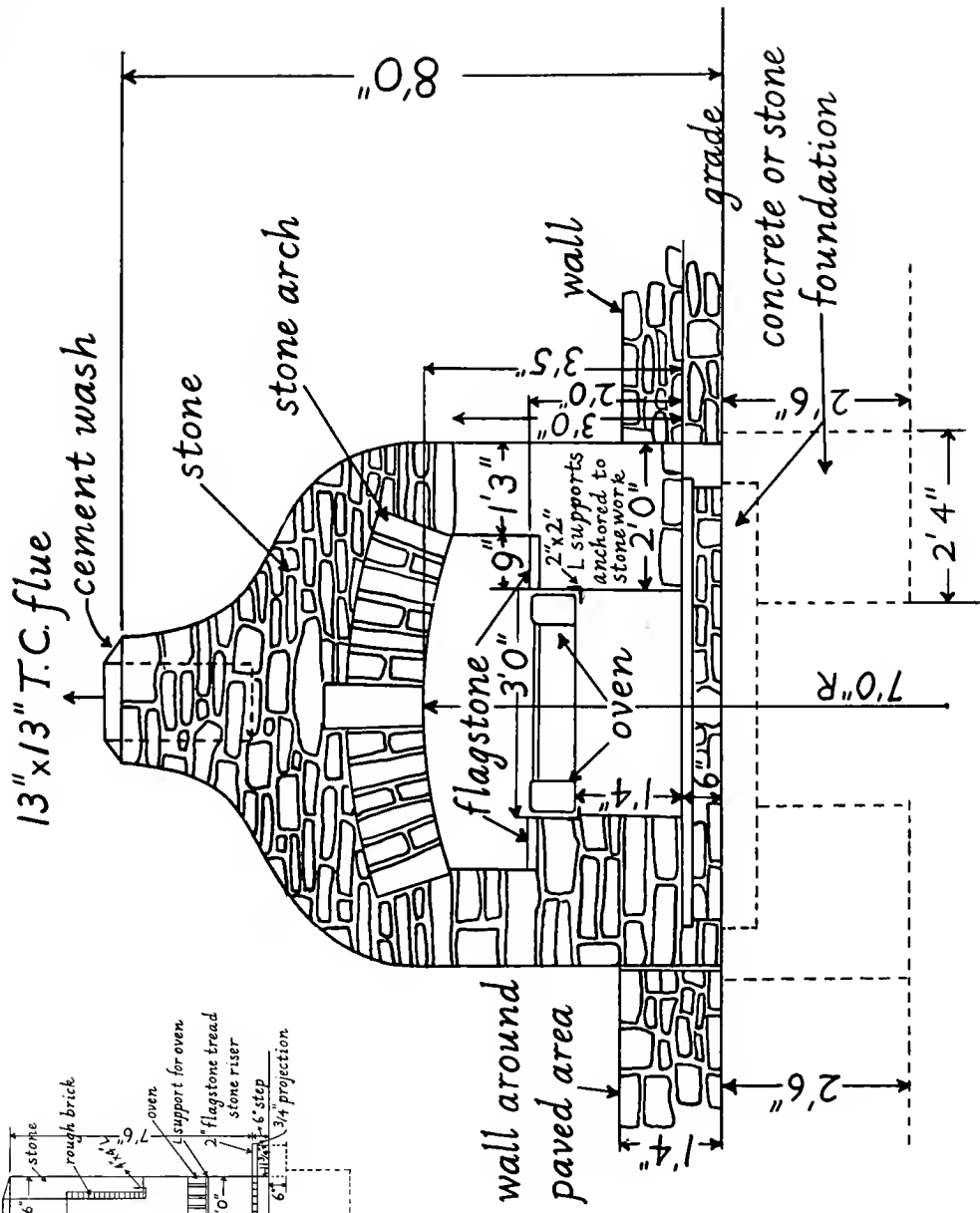
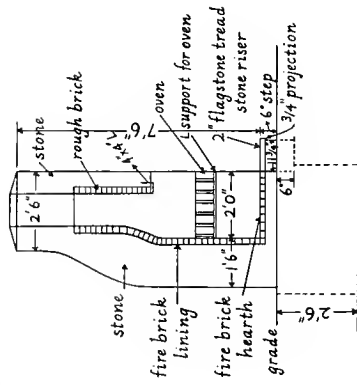


Photo by William M. Rittase, courtesy of House Beautiful.

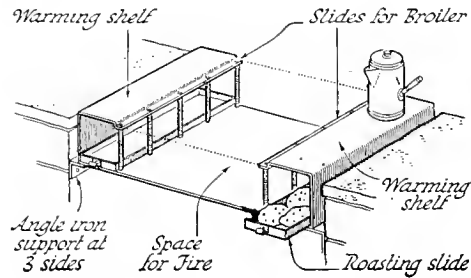
165. Outdoor fireplace and oven, designed by the owner, Mr. Ward Wheelock, for his home in Haverford, Pennsylvania.

A FIREPLACE WITH OVEN SLIDES. In the picture just above the table is set, a steak all ready in the broiler leaning against the fireplace is waiting for the fire to die down to live coals, and coffee is warming on top of an ingenious, sliding oven-rack in which potatoes are roasted and biscuits baked. There are two of these racks as the sketch on page 235 makes clear.



FRONT ELEVATION

They can be removed and the whole middle area under the arch can be used for an open fire. Next this central area are shelves topped with flat stones on which to set dishes to keep warm. There is a circular hole in the brickwork thirteen inches in diameter and three inches deep in which to bake beans in the old fashioned way.



167. Plan of baking slides and warming shelves in Ward Wheelock's grill.

The fireplace unit itself, eight feet high, is as unique as the devices for cooking, the seven-foot breadth at the base tapering up above the arched opening of the front to the top of the thirteen-inch square chimney flue. It was designed by the owner, Mr. Ward Wheelock, for his woodland home in Haverford, Pennsylvania. The fireplace stands at one end of a horseshoe-shaped terrace eleven and a half feet deep and twenty feet wide across the front, bounded by a low wall of bench height on the curves of the horseshoe and backed by tall rhododendrons, and hemlocks. The stone for the fireplace and terrace came from this section of Pennsylvania.

THE COSMOPOLITAN FLAIR FOR DINING OUT-OF-DOORS. It is not surprising that when modish restaurants in New York take to serving summer meals in gardens and sidewalk terraces in the manner of Parisian cafés that we should find outdoor dining terraces a feature of private homes replete with every modern comfort. In Mrs. Peter H. B. Frelinghuysen's winter home in Palm Beach, a breakfast and luncheon terrace about twenty-six feet square has been built off the dining room with a stucco wall seven feet high completely hiding it from the entrance drive at the front of the house and continuing around three sides of it. The picture on page 237 shows a corner with a seagrape tree near the door in the dining room, beautiful with its dark green shutters at either side. The coloring of the creamy keystone of paving and furniture is all springlike, high in key, in white and yellow and blue, even to the blue browalia and anchusa growing in the beds against the wall. Star jasmine and native vines, delicate in scale, make leaf patterns on the wall. The morning I visited the terrace, the air was full of fragrance and the canaries were trilling their



Photo by Samuel H. Gottscho.

168. Luncheon terrace at Mrs. Peter H. B. Frelinghuysen's home in Palm Beach, Florida. Architects, Wyeth and King.

songs. When the tables are set for a luncheon party, blue glassware adds to the sparkle and gaiety of the scene. All the table decorations are of crystal, and flowers are in vases seen through the glass tops.

Many of us do not like to risk dining outdoors evenings because of the chill after sunset or occasional fogs, gusts of wind or sudden showers. The Spaulding loggia shown on page 22 can well be studied anew for the ingenious way it protects by a roof overhead against rain and by a sliding eight-foot wooden door against cold winds along the exposed side overlooking the canyon. Heat comes from a brazier of coal in the center of the open patio.



Photo by Edison Studio.

169. Dining arbor in a Houston, Texas, home. Architect, John F. Staub; landscape architect, Ruth London.

A DINING ARBOR IN HOUSTON, TEXAS. In an angle outside the end of the dining room of a Houston home designed by John F. Staub and landscaped by Ruth London, a simple arbor has been constructed of hand-hewn logs entwined with Confederate jasmine, Heavenly Blue morning glory and coral vines to create a shady nook for the glass-topped table and wrought-iron chairs. (See page 238.) The details of the construction are well worth studying. The spacing of the supporting beams, the spacing of the half-round logs used overhead, the brickwork under each cross piece, the height of the service wing windows which maintain privacy on the dining terrace, the fine scale of the bricks in contrast to the large scale

of the flagging, the placing of the jars and the details of the planting—from such skillful handling of little details is the total impression made up.

PICNIC TABLES AND BUILT-IN DINING FACILITIES. As much ingenuity goes into the building of picnic tables and benches to stand the elements, as in the fireplaces that often supplement them. It is a great convenience to have such fixtures as one can leave out-of-doors in unprotected areas. The



170. Sketch of built-in picnic table and benches.

great majority are of stone or wood, sometimes combined with wrought iron, and simple and unpretentious in design.

The sketch shown above shows one style of construction of bench and table which can be made of cedar poles, cypress or white oak logs, treated with creosote to retard deterioration.

The photograph on page 240 illustrates how a single large slab of natural shape can be mounted on two pedestals of smaller slabs cemented in place to make a stunning table. This one, in a Vermont camp, is flatiron-shaped and has been polished so that it gleams like a mirror. Around it half-logs cut from the woods serve as permanent benches, mounted also on stone pedestals. Native stone flagging has been used under the table and benches as the necessary foundation for the pedestals. The view toward the pond and the Green Mountains has been well considered in locating the outdoor dining facilities in this camp, which include a stone-topped serving table and a fieldstone fireplace.

The sawbuck type of outdoor dining table is simple to construct and can be treated with creosote each season to withstand the weather. One advantage of it is that it can be set on the grass and not sink in as tables with small vertical legs are apt to do. In the patio shown on page 14 a bench has been built in under an outdoor stairway at one side of such a table.



Photo by George H. Davis Studio.

171. Stationary table with natural stone top and log benches, at Mr. H. Brandon Jones's Vermont camp.

The outdoor table at Shirley Temple's home in California is shaded by two unique copper umbrellas. (See page 295.) The writer Joseph Wood Krutch and Mrs. Krutch have an informal picnic table and simple portable benches against the foundation wall of a former shed in their Connecticut home. (See page 241.) The wooden table top is mounted on sawhorses at each end, and can be lifted off to store during the winter. The benches are simply constructed, with low backs which add to their comfort. (One of the pet geese came up to investigate in the hopes of being fed or fondled when the picture was taken.)

A unique and satisfactory way to build a table in an open terrace is to build it around the trunk of a tree, preferably a spreading tree, which will cast shade as it matures. A plum tree would be delightful for the purpose. A six-sided or circular table top can be built in sections, each

supported by its own legs so as not to injure the tree by fastening the table to it. Be sure to leave space around the trunk for its expanding girth.

SUMMER HOUSES, RETREATS, SHELTERS. Houses are much less burdensome to care for than they used to be, and much more open to the surrounding grounds. But the desire to be free from anything that suggests care, and to rest and relax close to growing things outside, has for centuries led people to build simple structures for that purpose, called by many names—gazebos, summerhouses, retreats, shelters or studios. We have many places for active sports around our homes. The summerhouse represents the facility for pursuits of a quieter nature. For anyone responsive to the out-of-doors, it would



Photo by Old Masters Association.

172. Picnic table in Joseph W. Krutch's home in Redding, Connecticut.

have much more appeal than an upstairs study or a basement hobby-room, and could, of course, be made tight enough to use in all kinds of weather. What the playhouse is to a child, a retreat of this kind is to an adult.

If you generalize on the requisites for garden retreats, you find privacy is one essential, a pleasant outlook another, and such protection from rain or wind or heat as you deem important. One must not forget protection from wasps and mosquitoes. One of the electric lights that attracts and kills insects may be the answer to this need. If for some reason you cannot have a screened porch next the house in which to enjoy sunsets and afterglow,

moonrise and starlight, in localities where insects are a nuisance, by all means screen your pergola or summerhouse and so lengthen the hours you can spend outdoors. See the screened terrace on page 300 built in a jog next a house like a porch but with a roof over only one end.

THE LOCATION OF THE GARDEN HOUSE. The shelter that is not too obviously in sight of the house seems to make even a small piece of property more interesting and therefore more extensive. It may be the retreat is down in the cellar foundations of an old barn that has been razed, perhaps built into one corner with the rest of the foundation walls serving as the low enclosure for a small private garden.

In Mrs. Samuel Watt's home in New Canaan, Connecticut, the enclosed summer house is tucked away against a garden wall in a section of the grounds partially secluded by trees and shrubbery. It is reached across a little lawn of its own, bordered by flower beds with a birdhouse set up above the wall. It is built as a rustic cottage, with heavy, hand-rived cypress shingles for the roof, random-width siding, rough-sawed and left with a natural bark edge, and a chimney of rough bricks like the fireplace inside. A bench is placed just outside the door.

This section of the grounds had no interest to attract one to it until it was chosen as the place in which to locate the summer house. Then it became an objective worth going to. If you are planning a retreat, find some spot, perhaps a blank stretch of wall, which you can make attractive by this feature. If the location lacks outlook, you can in your planting, make up for this lack.

A summer house may also be placed where there is an extensive view. On a rocky point at Manchester-by-the-Sea, a six-sided shelter has been designed with a fireplace built into one solid wall. The other five sides are equipped with folding glass doors, allowing views in all directions. See the photograph on page 330.

A FORESTER'S HUT. The small retreat for special hobbies can often incorporate ideas and motifs that would be inappropriate for our larger year-in and year-out houses. The fanciful has more scope for play in such a building, which can be so secluded by planting as to have an atmosphere of its own, different from the main house. In one terrace above the river at Helen Hayes's home in Nyack, the chief interest is a little building used to store garden tools but quite capable of many uses. (See page 243.) Mary Deputy Lamson, the landscape architect, says: "The tool house was suggested by the forester's huts in the Black Forest in Germany. It is set among woodland trees in the lower corner of the grounds and we tried to make it blend both with the woods and the Victorian character of the rest of the place." Paul Rudin was the sculptor whose delightful carving of woodland animals

makes a frieze above the door. His birds decorate the panels of the Dutch style door. The carved work has been painted forest green and then wiped



173. Hut on the grounds at the Charles MacArthur home in Nyack, New York. Landscape architect, Mary Deputy Lamson.

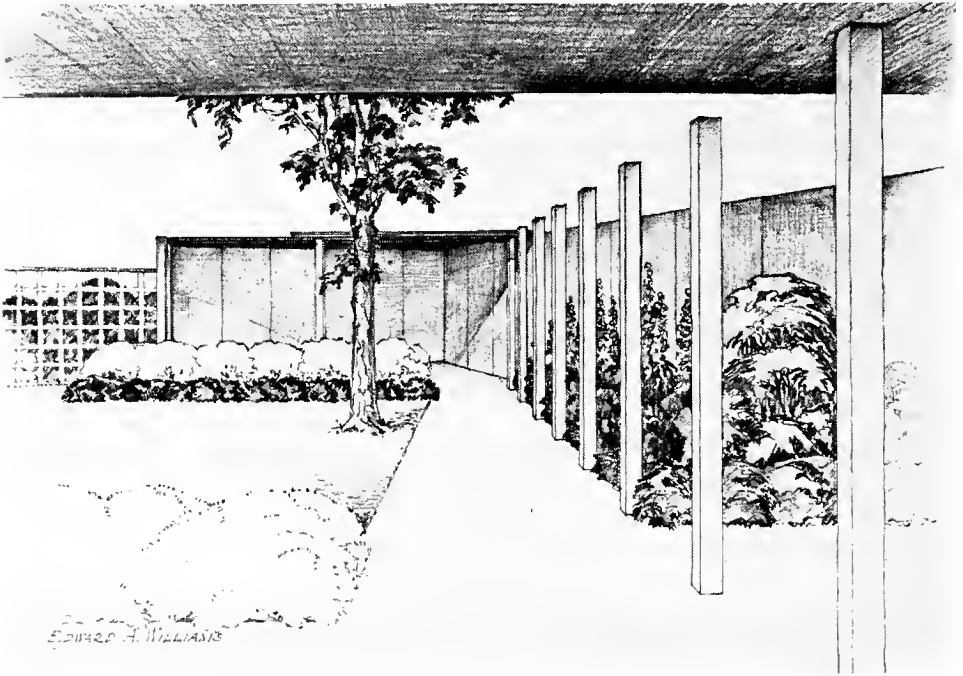
off so the color lingers brightest in the recesses of the carving. The rest of the hut is weathered a warm gray. With the porch and the gay little cornice, it would make an enchanting playhouse or it might stimulate people with a penchant for carving to do something as unique for a studio.

THE IRREGULARLY SHAPED SHELTER OF PLYWOOD. With a flat roofed studio, the shape can be irregular. The landscape architect, Edward A. Williams has located a cool, partially enclosed shelter (see page 244) in the corner of the yard of what he calls "the minimum home". The structure is not an exact oblong. The entrance is on a line with the study door of the house. The house itself is set askew on the lot in order to get desirable exposures for two sides of the living room, toward the southeast and southwest, insuring sunshine all day long in that room. A path of native red crushed rock leads from the study to the retreat.

A most interesting result is gained by the series of posts. They are sta-

tioned along the path like the ones that support the porch and they tie the shelter loosely to the main structure.

The path tapers as it recedes from the house, partly to make the distance seem longer than it is by the resulting perspective.

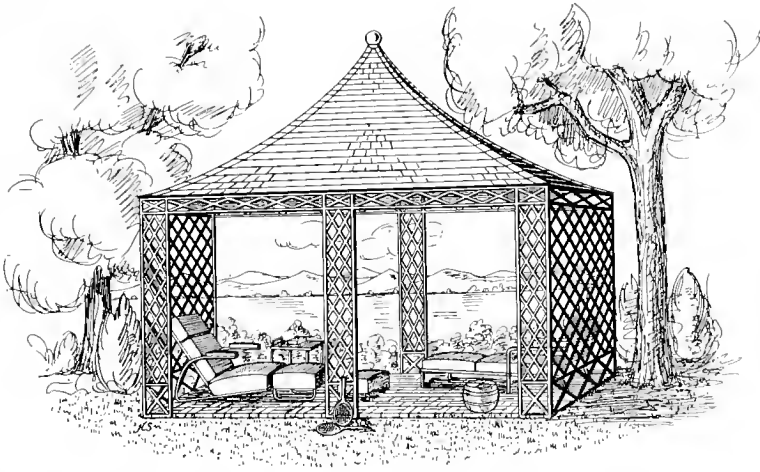


174. Sketch of a plywood garden shelter by the landscape architect, Edward A. Williams.

Shade for the roof of the shelter is provided by the Chinese elm tree next the path. Both the walls and the roof are of plywood specially surfaced for outdoor use (see page 181), as is the plywood used for the fence at the right. Inside, the flooring is of the same red crushed stone as the path, except for the irregularly shaped pool in one corner, which will help to keep the retreat cool in hot weather. A row of dwarf lemons, evergreen in nice contrast to the thyme at their feet, comes up around the retreat like a low balustrade at one side. For a pleasant outlook there is the flower garden on the side of the path next the fence.

The whole plan is indicative of the modern trend to provide even the smallest of homes with an objective away from the house and to relate the house and the grounds so that each is extended by the other.

LATTICE DESIGNS FOR TEAHOUSES. A shelter designed with lattice walls or lattice roof is a traditional way of obtaining partial shade in a tea or garden house. The sketch on page 245 shows an interesting variation of a lattice



175. Sketch of a rectangular lattice tea house.



Photo by Fred R. Daprich.

176. Lath house at the home of Mr. Fred B. Stanley
in Beverly Hills, California.

pattern with a cornice and base design of a larger scale than the rest. It is designed as a rectangle with two open sides, for views, and two enclosed by the lattice. If desirable, one of the open sides can be framed in solid and a closet for outdoor furniture or garden tools be built across this end.

A LATH HOUSE FOR SPECIAL INTERESTS. In the hot sun of southern California, many plants will not grow out-of-doors because they cannot stand the direct rays of the sun in that latitude. Mr. and Mrs. Fred B. Stanley, the owners of the lath house shown in the photographs on pages 245 and 246,



Photo by Fred R. Dapprich.

177. Bird cages in the lath house of Fred B. Stanley
in Beverly Hills California.

had an interest in raising such plants and in rare birds. Their retreat was planned as a place to indulge those interests. "Our lath house" writes Mrs. Stanley, "has given us so much pleasure we are glad to pass it on to others. It was a child of my own brain, suggested by a commercial lath house used for two purposes: one, the raising of flowers needing protection from the direct heat of the sun, and the other as a salesroom for garden and patio furniture. Mr. Robert Lewis drew the plans and just a plain, everyday carpenter built it."

It is situated at one end of the garden in the corner made by two stucco walls. The barrel-shaped roof and the other two sides are of wooden slats,

so that light and air filter through. The flooring is of stone chips. They take care of drainage when the pots of plants drip after being watered. Over the roof are awnings which can be rolled back according to the needs of the many varieties of begonias, fuschias and unusual geraniums which hang in baskets from the cross beams and grow also in pots in the border of loam and moss around the inside of the lath house.

One photograph, page 245, shows the end where the plotting and gardening is attended to with shelves and cupboards for supplies; the other view, page 246, shows the end devoted to the birds in cages covered with an awning for their comfort. From the furniture you would know the place was lived in, as such an outdoor room, cool, airy, and shady deserves, with its hundreds of plants and living birds making a rich display of blossoms and



Photo by George H. Davis Studio.

178. Garage at the summer home of Ethel B. Power
in Gloucester, Massachusetts.

plumage. I have often noticed that any room where plants and pets are kept, no matter how much of a workroom it may be, attracts visitors to sit down if there are chairs and settees for the purpose. Living things have an appeal that is hard to resist and make any sitting area more companionable.

WORKSHED, OUTDOOR DINING ROOM, AND GARDEN COMBINED. Through the door of Miss Ethel B. Power's small garage and tool shed at her tiny seaside resort in Gloucester, Massachusetts, you can see on page 247 how she combines outdoor living arrangements with her working area and with the



Photo by George H. Davis Studio.

179. Outdoor dining terrace and garden at Ethel B. Power's home in Gloucester, Massachusetts.

flowerbeds, no bigger than packing boxes. The flowers are, in fact, growing in small boxed-in beds of rich earth raised so as to be cultivated and weeded without stooping and also because a change in levels in any garden creates interest. The other picture, on this page, shows the dining arrangements and makes one long to do pocket-handkerchief gardening which is fun for weekends, and not too much work. Dwarf fruit trees grow in the corner beds, surrounded by plants that make a succession of bloom throughout the summer. The beauty of it all is its compactness, and the fact that you can take it in while having lunch on the gay plaid table-cloth in the shade of the little canopy of painted slats. Keeping the surface under foot earth and sand instead of trying to have a lawn saves trouble and also adds to the effectiveness of the greenery all around. It is one way of avoiding monotony and gaining contrast for the flowerbeds which should predominate.

CHAPTER X

PLANTING IN RELATION TO LIVING AREAS

It is NOT our purpose to discuss gardens from the horticultural point of view, but it is important to discuss planting in relation to living areas because planting is the structural framework giving shape to our organization of the grounds. A house is fundamentally a man-made shelter, placed on some little section of the earth's surface we want to incorporate as a unit with it. To do this, we utilize a great deal of natural material—ground covers, trees, vines, shrubs and plants—just as we use floors, walls, ceilings and furnishings indoors. We preserve whatever is already on the grounds, providing it serves our needs, and we add to it for definite reasons. It is good sense in landscaping not to lay out more in cultivated gardens than we can readily maintain.

However we conserve on gardens, we cannot avoid such problems as what natural material to employ to relate the house to the grounds, to screen certain outdoor areas, to create backgrounds and foregrounds, to frame or extend vistas, to establish definitions and boundaries. These are only a few of the uses afforded by planting with a purpose. In every case we have the complex and fascinating problem of choosing and locating the specimens or groupings so they give us the most pleasure of form, fragrance and color, the most return in every sense of the word for the least expense and upkeep.

A sense of design values is what we need to cultivate in order to select, locate and arrange our landscape material intelligently. This should be stressed in our reading, our garden tours, our study courses, our garden club programs. No amount of prize blooms around our homes can make up for a poor or banal planting design.

MAKE A ROUGH DIAGRAM. Before you can choose or locate plant material with any degree of finality, you must know what you require in the way of spaces outside the house for terraces, pools, gardens, service yards, orchards, playcourts, etc., and you must relate them to the house and plan ways of getting about between these various places, as well as the drives or walks to and from the main doors of the house. You lay out the paths and open spaces to make free and flexible circulation possible. It is advisable to have more than one way of reaching much-used outdoor areas, but not feasible to cut up our spaces with many arteries of circulation when we could reduce them to a few.

All this planning can best be done by measuring outdoor areas, making a rough diagram and then staking out the outlines on the land for possible

revisions. Work out as much as you can on the grounds, because then you are aware of many factors such as changing levels, contours, views, existing trees, which you want to feature or change in your scheme. Even professionals find it hard to allow for these factors if they work mostly inside at the drafting board. Models help us to rectify and simplify our diagrams, and plan the size, shape and location of the large, important trees and shrubs we visualize as necessary elements in the design.

LAYING OUT THE SPACES FOR USE AND CIRCULATION. In the French Colonial house and grounds shown on pages 76 and 159, before any planting scheme could be attempted, the ground areas had to be worked out as space for the flower beds, pool and lounging areas to the south of the house, the orchard to the north, with children's play area and vegetable patch beyond, and the badminton court at the rear across the rest of the property. The service yard had to be planned behind the garage, handy to the laundry tubs in the utility room, separated by a high stucco wall from the garden and screened from the street by a six-foot hedge. The orchard was situated where it would provide an interesting outlook from the dining alcove, and the rose garden where it could be seen from the living room windows.

The style of the house itself was suggested by certain early houses in New Orleans built by the French colonists, although the interior plan is for modern living. It opens up for easy access to these various outdoor interests through the generous French windows and doors consistent with such a house. The scheme for a rose garden with a six-sided central bed, as well as for fruit trees and flowers in geometrically shaped beds, not necessarily exactly symmetrical in arrangement, are all appropriate to Louisiana houses of French influence and to many other houses in other localities.

CONSIDER THE PATHS AND OPEN SPACES. The paths have been laid out in the garden south of the house, so that you can go around and across it and take advantage of three different lounging areas in it—the broad expanse outside the living room door, the terrace at the end against the west wall, and the open space under the tree nearest the raised pool. You can enter the garden from the living room, the porch and badminton court or by the path around the rear of the house. This path connects with the path from the front door past the orchard and kitchen terrace and on to the vegetable patch through the grape arbor.

THEN THE TREES AND SHRUBS. You will note on the plan for this French Colonial house, besides the orchard group of trees, there are four large specimen trees. Each is chosen for its suitability for a certain place and purpose. The house needed a tall, spreading tree near the entrance to the

motor court to build up from the garage elevation of one story to the main roofline. So a sweet-gum tree, *liquidambar styraciflua* (hardy from Connecticut to Florida, with leaves somewhat like a maple), was located on the plan next the path from the entrance to the service yard.

Behind the house a towering tree was needed to bring down and subordinate the house top. But the tree here must not be spreading or it would cut off too much sun from the rose garden. The problem was solved by selecting a tulip poplar, *liriodendron tulipifera*, one of the noblest of American deciduous trees, with a range from Massachusetts to Florida. It is situated where its columnar shape will shield the rose garden a little from the hot western sun, as does the high stucco wall behind it.

Magnolia grandiflora makes a wonderful evergreen shade tree in the south. So this was the choice for the sitting area close to the raised pool. A yellow willow is planned for spectators to sit under while watching a badminton game, because it grows rapidly into a graceful, sizable tree with colorful yellow twigs.

TREES ARE ALL-IMPORTANT IN RELATION TO THE HOUSE. The house is your largest architectural unit. You want it to fit into the grounds as belonging there. As we shall soon see, this is not a matter depending entirely on the planting. There are no arbitrary rules to follow like recipes. You cannot say, for instance, that a formal Georgian house must have formal planting. It could be adjusted to certain sites equally well with irregularly shaped trees and shrubs by a person aware of the possibilities. The point is to have the planting organic, chosen with a meaning and a regard for scale.

Trees are the most important materials to use in relating a house to the surroundings because they alone have the scale and the shapes that compare with the height and mass of a house. One large tree in the right relation to a house, not necessarily up close to it, can do more than dozens of shrubs and hundreds of plants to bring it down into the landscape and keep it from being an isolated unit in the scheme. Moreover for the practical matter of shade, trees and houses have been associated for centuries.

OUR ANCESTORS HAD ROOFTREES. The photograph of the early nineteenth-century house on page 253 deserves study. The Norway maple was planted far enough from the front door so that it could grow toward the house and eventually top the peak of the gable. The shadows it casts on the house walls help as much as the shutters, the niches and the varied window openings to give depth and richness to the otherwise plain stucco surface. A tree that has weathered a century is worthy of respect, doubly so when it has developed its girth and balanced form and arching branches in every plane as the complement to an equally distinguished house. This is an example

of an irregularly shaped tree with a balance that is not symmetric, next a house built with symmetrical balance.

A MODERN HOUSE DESIGNED FOR A HILLTOP OF OAKS. The site for the house designed by Frank Lloyd Wright, shown on page 171, is a hilltop of native oaks, windswept, gnarled, widespreading. He designed a one-story house that is anchored as firmly as the oaks, its horizontal lines and rugged unsymmetrical mass conforming to the contours of the hill and the trees. He located it so that one oak shades the living room terrace. Another is in the terrace outside a bedroom. Where an overhang of roof would interfere with a third, he left a hole for the trunk and built the overhang around it. Thus the trees and the rooflines compose from any angle of vision. The junipers growing in window boxes have been used purposely to accentuate the horizontal lines of the house. The vines growing on the projecting overhangs do the same and afford shade from the glaring summer sunshine. But the trees are what count. Wherever you can build in relation to old trees, do so with the advice of your landscape architect. It takes much longer to create the same effect if you have to plant young trees.

LOCATING YOUR TREES. It is quite possible to locate one or two trees near a house without having the dooryard gloomy. It is also possible to choose the kind of trees that will give shade where you want shade without robbing the ground of too much nourishment to support a lawn. Tall trees may be located at the rear of a house to add their mass to the roof and chimney. Or they may be located near the corners. If they come near windows, only the trunks or a few lower branches should intervene as you look out from important rooms when the trees are grown. Naturally you do not orient your living room so it faces some unwelcome outside view that has to be screened by dense trees, if you can possibly help it.

HOW TO ANALYSE PLANT FORMS FOR THEIR DESIGN VALUE. "You can't see the wood for the trees" is a familiar saying that applies to the average person who does not see landscaping in terms of design and three dimensional space because he is absorbed in purely horticultural interests, or has only a sentimental approach to the subject. When we select a common lilac, for instance, to plant at a corner of the house, are we not selecting it mostly for its blossoms which endure for only a short time or because of our emotional reaction to a lilac? Can we enlarge these two points of view to include a more comprehensive understanding of the common lilac as a shrub of a certain height, when mature, that we need, a certain spread which is desirable, a certain color value when one depends on the leaves and trunks alone, and a certain habit of growth that may be fitting to a certain spot in relation to the house and the surroundings? If we can learn to analyse a

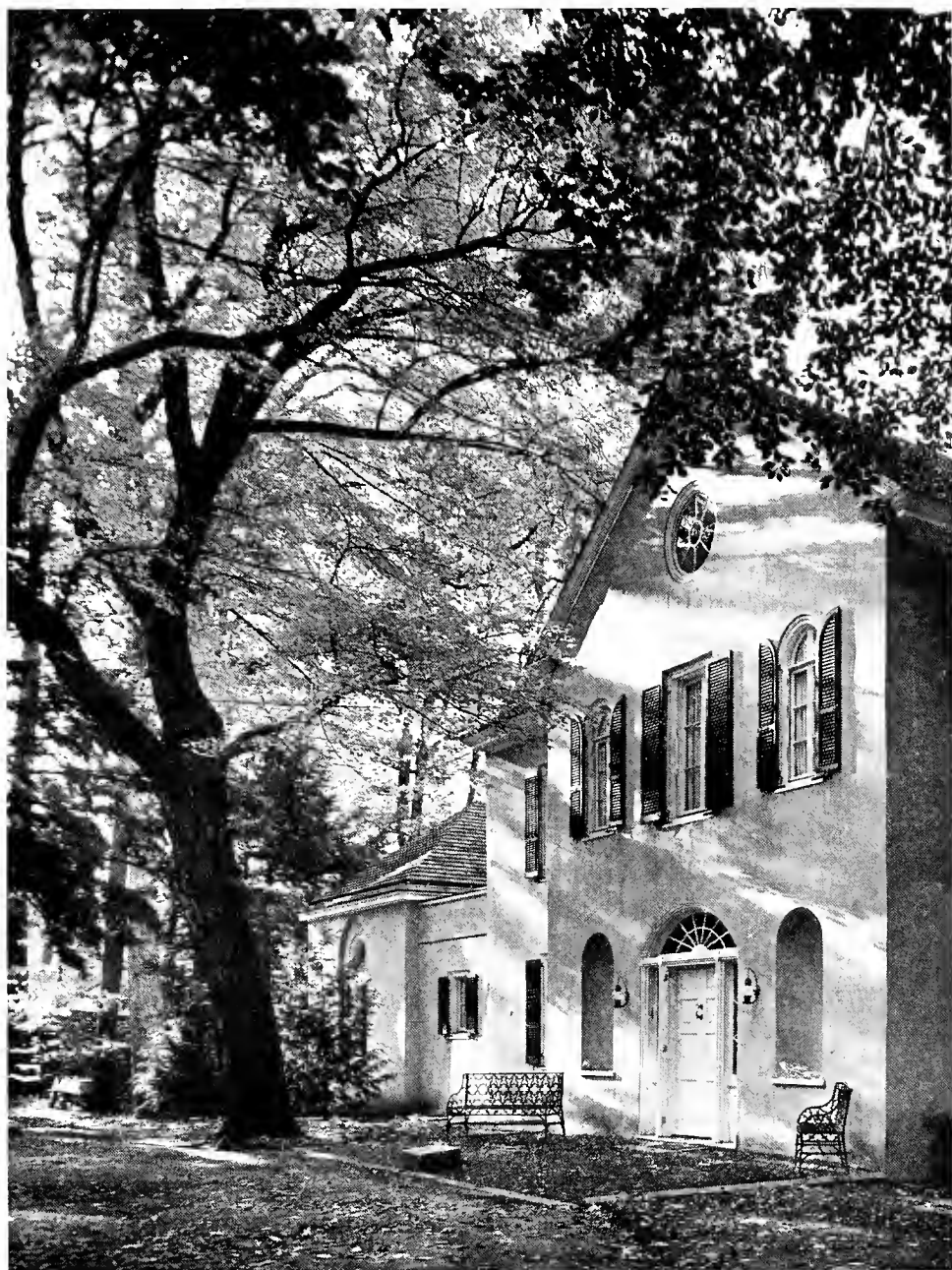


Photo by Damora.

180. Entrance and Norway maple tree at Louviers, in Wilmington, Delaware, designed in 1811 by E. I. duPont de Nemours, restored by the architects Victorine and Samuel Homsey for the present owner, W. W. Laird.

specific tree or shrub for its abstract value, we may use it much more effectively.

As a clue to selecting material from the point of view of design, consult page 343 for a list of major plant forms which can be used in the Northeast, analysed by the landscape architect, James C. Rose, for the qualities they would assert in a given design if growing conditions were favorable. It includes the height, the relative color of the foliage, and the shape, such as broad and spreading, round, picturesque, columnar, pendulous, and so on.



Photo by Mattie E. Hewitt.

181. A Woodland setting for a modern house in North Stamford, Connecticut, owned by Miss Marguerite Jordan. Architect, Coleman Moser; landscape architect, Stanley Underhill.

Many people like a tree for itself but have never stopped to think what the effect would be in relation to their homes. The grace of birches, the grandeur of elms, the delicacy of the red bud, the bold outlines of hickory and sycamore, the breadth of a beech, the spire-like height of a spruce, or the rural effect of an apple tree as opposed to the woodland effect of a group of oaks and white pines, all that pertains to the tree as a form should be considered to carry out your purpose.

CLARIFY YOUR PURPOSE. In the modern house designed for a woodland property just above, the landscape architect located the house so that twin oaks, like sentinels, stand at one corner and a third oak stands at the rear,

while a flowering dogwood spreads its branches near the entrance. The intention was to scale down this little house of cinder blocks. The tall trees help enclose it without cutting off vistas from the windows or from the many doors at the terrace end. Shrubbery is concentrated in the corner, mainly high bush blueberry and azaleas, with laurel to strengthen the mass in winter. There is no attempt to plant all around the house. The full-grown trees have already related the house to the setting, for the landscape architect was consulted by the architect and owner before excavations started.



Photo by Garrison.

182. Entrance planting at the home of Fritz Kunz in Port Chester, New York. Architects, Scott and Teegen.

ONE LARGE TREE CREATES A SETTING FOR A SMALL HOUSE. In the low-roofed Colonial home shown above, the large apple tree next the road, seen only as a trunk, creates a setting for the house. A snowberry bush at each side of the traditional New England door and another near the corner accent it slightly, but the delicacy and mature size of the snowberry will never obscure or dwarf the house walls.

WHY EIGHT LARGE TREES WERE PLANTED. In Bernard Boutet de Monvel's Palm Beach home (see page 256), two palms are planted in each of the four terraces to emphasize the octagonal shape of the house. In Florida, transplanting large trees like these seems to be done as a matter of course. In the North and East, also, moving facilities have been vastly improved.



Photo by Samuel H. Gottscho.

183. Entrance of Bernard Boutet de Monvel's Palm Beach home.
Architects Treanor and Fatio.

SELECTING LARGE TREES. Do not cheat yourself at the start by selecting a small tree to fill a large order. One reason is that your interest in your landscape effects deserves to be satisfied while it is still fresh; you will lose your enthusiasm waiting years and years for a whip of a tree to develop in an important location that calls for a large one. The other reason is that if you start with a sapling you have no surety it will develop the shape you have in mind. As against buying two small trees, invest in one large one as a start. It has double the immediate effect. The same advice applies to shrubbery that is slow-growing.

In selecting your plant material, take as much pains as the landscape architect would to pick a single tree of the right size and shape for the place it is to go. He may visit a half-dozen nurseries to find the one maple or apple tree that for fifty years will dominate a landscape setting. You may be tempted to spend less time picking out your tree than you would to pick out a hat for one season. You may be tempted to save a few dollars by getting inferior specimens and then have to apologize for them the rest of their existence.

SHRUBBERY AROUND THE FOUNDATIONS. A curious notion has grown up in the matter of shrubbery in relation to a house. It used to be considered immodest during the Victorian era for women to show their limbs or ankles.

Skirts must cover them up. If we are to judge by the many houses swaddled next the ground with billow upon billow and pointed peak next to pointed peak of symmetrical evergreens, one must admit that we seem to have a perverse horror of showing the line where a house meets the ground. We may be proverbial Scotchmen about spending money lavishly on gardens, but tens of thousands of standardized assortments of evergreens, bought for the sole purpose of masking the foundations, are growing up in profusion around American homes. They should not be needed in such quantities.

HAVE THE HOUSE FIT THE SITE. If a house really looks awkward without continuous foundation planting around it, something is wrong with the house. It should be wedded to the land before you plant. If you insist, over the advice of your architect, on a higher house than will adjust to the site you have chosen, do not expect the landscape designer to make up wholly with shrubs for the gawky effect. Very often, by being consulted before the house is built, the landscape architect can work out with the architect difficult problems in changing the grading, or make suggestions about building a terrace out at the floor level that will keep the house from seeming about to fall off down a steep bank unless the foundations are smothered in planting.

If you look at the Hamilton house on page 52, you will see how much has been done in the design of the house to make it sit low on the ground even though it is on top of a slope. By flattening the top of the slope as a perfectly level terrace on which the house rests, this problem of anchoring the house to the land has been solved. The low evergreens casually planted on the terrace help loosely to emphasize the horizontal line of the long low roof. There is no ugly line to be concealed where the house meets the ground.

Sometimes it is impossible to avoid a sudden drop in grade from one side of the house to another. Then there is justification for masking the drop by high foundation planting. (See pages 38, 39.) In corners where a bulkhead opens into a cellar, shrubs help fit into the jog made by this cut. Where a porch or terrace is raised for a good reason, there is again justification for some planting against the wall but not necessarily a barricade of planting.

Note how the low terrace has been eased into the surrounding lawn in the house pictured on page 258, by one low step the full length of the terrace. Bare earth comes up to meet the step, a fitting place for chairs and picnic tables for times when the shade of the dining nook is not necessary. The garden is just beyond. The pots of plants on the terrace are incidental; the espalier fruit trees that will grow up against the trellis are not inci-

dental but a part of the architect's plan, and he left plenty of wall space for the purpose. But as for masking foundations, there is no need of it.



Photo by George D. Haight.

184. Terrace and planting at the rear of the Guy M. Searcy home in Pasadena, California. Architect, H. Roy Kelley; landscape architect, Katherine Bashford.

CONSIDER THE MATURE SIZE OF WHAT YOU PLANT NEAR THE HOUSE. It is human nature to set out trees and shrubs, but somehow against human nature to dig them up if they outgrow our expectations! Half the mistakes made in planting in relation to a house are in choosing innocent little evergreens without the faintest idea of the size they will attain after a few years. Take the trouble to find out in advance that what you intend to plant under a window is not going to obscure it completely and cut off your view, or better yet, set out full-grown specimens. Then you will buy only as many as you need and be better able to select kinds and shapes that suit your purpose. Consult the list on page 343 observing the height of shrubs of various shapes.

PLANNING AND PLANTING FOR PERMANENT EFFECTS. Sooner or later you will find yourself trying to decide whether to put in plants and shrubs close together for their immediate effect, or whether to space them out to allow for their future growth. I am assuming in both cases that you are buying immature specimens.

If you buy little trees and shrubs and plant them where you want them, far enough apart for their future development, the immediate effect is peculiar and unfinished, to say the least, and casualties are apt to run up because plants and trees and shrubs are gregarious. They thrive better, when they are small, in proximity to each other. On the other hand, if you plant little immature specimens thickly where you intend them, you will eventually have to thin them out. The temporary effect may be gratifying but you have bought more specimens than you need, and you are going to have the trouble or expense of moving the unnecessary ones later. This is often neglected until the struggling trees or bushes have injured each other or grown into unfortunate shapes.

The logical and more efficient plan is to develop just one part of your grounds at a time, but when you undertake it, do it once and for all with nearly mature specimens. Then you know what the results are. You can buy as many full-grown shrubs and trees as you can at first afford for the important strategic positions around your house. And you can buy young immature specimens for future developments and set them out in rows in good soil and sun in a cultivated garden patch, and not put them into their permanent positions for several seasons, until they are somewhere near the size that will give you your satisfactory final results. Meantime, you can take care of them readily in these rows where they get proximity to other plants, and can be separated as they grow.

Too often we buy some very common hedge material, such as privet, because we cannot afford to buy enough plants of Japanese yew, for instance, of the size we want to set in place. If we plan ahead, however, and buy small plants of the yew and give them nursery care for a few years, we can in time set out a hedge worth having.

REASONS FOR LOW HEDGES. Many evergreens and shrubs grow slowly, and can be kept clipped as a low hedge under windows across the front of a house or piece of property, if this is desirable to create a low boundary between the house and the sidewalk. It is appropriate in towns and cities and where houses tend to be formal, at least on the street side. This is a pleasant way of handling planting that will not obscure one's outlook but will relieve the hardness of walks and pavements and stone or brick walls.

Against the retaining wall of the terrace of the Texas home shown on page 30, a low, close-clipped hedge has been set out to bring a line of green across the stonework. Vines mantle the white brick walls of the house. No planting is needed to screen the foundation itself. In the photograph of a Long Island home on page 91 you will see a house placed on a wooded plateau, with no awkward basement elevation to be concealed as the first floor level is only a few inches above ground level. At the front

of the house, free-growing evergreens and shrubs are set to bring the greenery against the white of the house for contrast. They are not prim, but harmonious with the natural character of the wooded surroundings.

PLANTING FOR ACCENT. Have you heard it said that we must accent important architectural features with planting? This applies only under certain conditions. Some doorways are so strongly designed that they do not need accenting. Note the picture on page 253 of a house superbly designed in 1811 by the Frenchman Du Pont De Nemours, the founder of the Dupont chemical factory in Wilmington, Delaware. Foundation planting and accents at each side of the door would be superfluous. But you will see many fine doorways ruined by overplanting or bungled planting, in no way related to the subtlety of the doorway.

At the entrance to a low one-story Florida house shown on page 261, the architect deliberately counted on the tall, attenuated cacti growing at each side of the neo-classic door to give height there and accent the vertical lines of the door in dark values against the light beige paint. He could have designed a door with columns or pilasters casting dark shadows to do this. The mistake here would be to do both.

Discretion and restraint are needed if we are to avoid another common mistake and accent *every* door, *every* window, and *every* corner of a house. Then we lose the emphasis that only one planting of importance can give.

ADVICE IS LESS COSTLY THAN MISTAKES. If you are a novice at landscaping, utterly at sea as to when to use restraint and where to accent; if you do not understand how to get balance or depth into your scheme and have had no experience in handling landscape material in terms of shapes and patterns of light and shade; if you have never given a thought to their contrasts in form and textures and gradations of heights, or if you cannot decide when a single specimen is needed and when a massed effect, the wisest investment you could make at first is to pay for a professional consultation. What many home owners fail to realize is that young landscape architects, for a moderate sum, are glad to come in and advise you, perhaps on the site for your house, or what existing trees to preserve, or what new planting to select around your home, without drawing up an elaborate landscape plan for the entire grounds.

Perhaps you like the fun of starting out by yourself, and then get stuck but are not sure just what is wrong or how to correct it. That is the time to get professional help. The chances are that a person trained in landscape design could get a better effect from three well-chosen items, say a dogwood tree, a wistaria vine and a spreading yew, in relation to a house, than you could get by a dozen trees or shrubs indiscriminately selected and massed. Instead of buying more plant material to try to offset your



Photo by Samuel H. Gottscho.

185. Entrance to the patio and corridor in the Messmore Kendall home in Palm Beach, Florida. Architects Treanor and Fatio.

mistakes, invest your money in advice. It is not quantity of material that counts but the quality of the design. Perhaps what you have already simply needs thinning out and relocating.

PLANTING TO SUIT THE HOUSE. A good example of planting, when the shapes are chosen for a design function that suits the architecture and the sizes are varied for a purpose, is shown on page 263. Here is the exact opposite of a miscellaneous assortment of evergreens massed without regard for the house. The entrance door needs no vertical lines to strengthen the design. The small rounded shapes simply lead up from the ground level with the steps, but because they are rounded symmetrically, they suit the roundness of the dormers, the roundness of the pillars and the severity of a Greek Revival style.

Large rounded evergreens appear as the notes of accent near the corners of the house where there are no architectural embellishments to compete with them. They help define the limits of the house front, and their shapes again repeat the dormer curves. The severity of these forms is subdued by the addition of tulips and other plants between the evergreens.

The three trees in the picture are even more important in relating the house to the space it occupies than the planting close to it. The one in the rear gives depth to the perspective and serves some purpose on the other side of the house. It makes you aware of the fact that the house is not a flat silhouette, but a form with length, breadth and thickness, and with space above, around and behind it. The foreground tree extending a curving branch toward the roof has the height and sheltering quality in relation to the low house that dispels any sense of formality in the landscaping. It also provides the vistas through upper spaces above ground level we need in all landscape designs. Only someone with a sense for design would have known that in the jog between the house and the semicircular portico around at the side, an informal spreading tree with horizontal rather than drooping branches would accord with the lines and height of the house. The dogwood chosen is just right from the point of view of design, and also because the soil and exposure suit it.

The Long Island farmhouse shown on page 153 has roses growing over the entrance porch, and a wistaria over the dining room door (see page 7). A few specimen boxes, irregular in shape, are set close to the house, growing up from the brick courtyard in a sheltered situation.

PLANTING TO EMPHASIZE ARCHITECTURAL LINES. Another informal treatment is shown on page 264, in a modern house in Coral Gables, Florida, the first floor of which is evidently well above ground level for local climatic conditions, or perhaps to avoid snakes, scorpions or spiders. Here at the top of the rather high steps at the right of the door is a bin in which



Photo by Tebbs.

186. Front of the Milledgeville, Georgia, home of Mrs. E. D. Napier, showing appropriate planting. Architects, Hentz, Adler and Shutze.

small palms are planted with ferns. Instead of another horizontal bin at the left of the door, there is a projection of the house walls, due to the interior plan for a coat closet. Outside, one vertical line of this projection is emphasized by the bougainvillea vine ascending the wall to climb out over the cantilevered trellis to shade the dining room. The arbor and the vine emphasize, as the architect intended, the rounded shape of this group of windows. Below the windows the ixora and ligustrum shrubs do the same.



Photo by Ernest Graham.

187. Entrance planting at the Ernest M. Reinhold residence in Coral Gables, Florida. Architects, Plevitzky and Russell.

Wherever planting such as this conforms to the architectural lines, it should be done for a good reason, and be planned for in advance with the co-operation of the architect. If he counts on planting to strengthen lines and it is not supplied, the design is incomplete.

PLANTING AT THE FRONT OF THE TOWN HOUSE. There is a distinction to be made between the planting that suits a town street front and the kind of planting that suits a country home. The city treatment, to be appropriate, is more tailored, less intimate, more impersonal. The plan of a house for a town lot in the South (see page 159) calls for an evergreen hedge of



Photo by George D. Haight.

188. Street front of Mrs. Nelson Perrin's home in Pasadena, California. Architect, William McCay.

native yaupon (*ilex vomitoria*) across the street front and also to define the side boundaries. It can be trimmed and forms a dense screen. Along the street, as a double screen for the service yard, a row of sweet olive bushes (*osmanthus fragrans*) is planned in front of the yaupon. In the spring it has tiny blossoms laden with an indescribable perfume. Next to the front door a few low shrubs of boxwood are indicated. See page 76.

The street front of Mrs. Nelson Perrin's home in Pasadena, California, has a symmetrical formality in the plan but the materials chosen add an unusually gracious charm. (See page 265.) The brick path has a pair of old stone cherubs on pedestals at the entrance, and extends between graceful trees to the wide steps. Jars with small orange trees add greenery to the whiteness of the wall, and with the wrought-iron balustrade of the entrance terrace keep the house from seeming too narrow for its height, and build up dark forms against it.



Photo by George D. Haight.

189. Entrance from the enclosed courtyard at the former home of George Chappellet in Bel Air, California. Architect, H. Roy Kelley.

THE HOUSE IN A WALLED COURTYARD. Even though one lives in a town or closely built-up community, the front entrance of a house is shut off from public view by a walled courtyard, one does not ordinarily need a severe, tailored treatment in the planting. The picture shown above illustrates this. It also illustrates one of the chief reasons for having planting

against a house—to break up glaring expanses of light walls with patterns and shadows, especially in climates of brilliant sunshine. You can hardly see the old olive trees and oleander that reach up to the tiled rooftop just outside the garage at the right hand corner of the house. A tropical vine (*Solandra guttata*) grows over the garage. Other vines and espalier shrubs climb the walls from the low beds at each side of the door.

As often in California, potted plants are included in the planting scheme—crassula and sedums near the door, and salmon geraniums on the balcony. The combinations may sound flamboyant, but in this climate of bright sunshine brilliant color is not conspicuous, and it is important to break up large expanses of plain light stucco walls by planting and by shadows, such as the balcony casts here. Although it is colorful, the planting is delicate in scale; otherwise it would be overpowering.

PLANTING TO BE SEEN FROM THE HOUSE. So far we have considered the planting around a house only as seen from outside. We need to consider simultaneously the effects as seen from inside or from a porch. Thus, near the Cullman porch, shown on page 32, existing trees do much to relate the house to the grounds and to create pleasing forms seen from the porch or inside. At the same time they create a dense shade in the adjacent area. The solution of how to treat this area where grass proved an absolute failure, was to make it a green garden, restful at all times, and with some evergreens to combine well in winter with the tree forms. It consists of beds of English ivy outlined with *Ilex bullata*, with myrtle between the beds and along the walk. Farther from the house, the shrub planting consists of rhododendrons, *viburnum sieboldi*, deciduous azaleas, hemlocks and dogwood. There is eventually to be a figure at the end of the walk, and the planting is built in relation to it.

Trees seen from inside the house can be as thrilling a sight, with their sheltering forms against the horizon, as when seen on approaching the house. In the photograph taken from the portico of Oak Alley in Louisiana, on page 268, we see the sturdy pillar of the portico recalled in the sturdy trunks of ancient live oak trees that form a broad allée of dappled sunlight, intricate shadows and the patterns of transverse branches, an inspiration to look at from any spot on the portico or inside the house. Through the trees you catch glimpses of the low-lying fields as they stretch away as far as you can see in the distance. A double row of trees with spreading tops is the only arrangement which gives you the beautiful perspective of side branches meeting overhead, forming an archway underneath. But down the center of an avenue of trees is not the only direction to enjoy an outlook. These oaks are living sculpture, framing vistas in whichever direction you look, whatever the season.



Photo by Silvia Saunders.

190. Alley of live oaks from the porch at Oak Alley Plantation,
Saint James Parish, Vacherie, Louisiana.

PLANTING FOR THE FUTURE. If you need to be stirred into action about planting trees near your house for future enjoyment, not necessarily in an avenue, study picture 190. I am not unaware that it took a century or more for these live oaks to attain their full glory. But there are many trees that will surprise you by their stature after ten years, if you start with one that is a fair size. Willows, Chinesc elms, white pines, the red pine, or spruce; swamp maples, poplars, plum trees, apple trees, sycamores—to name only a few of the eastern ones—grow faster than you perhaps think, if planted where the soil conditions suit the tree.

TREES IN CONTRASTING COMBINATIONS AT A DISTANCE FROM THE HOUSE. The high spots, literally and figuratively, in any outlook from a house or adjacent terrace are the trees. They deserve much more thought as design features to be combined in endless ways that spell beauty, than the little drifts of bloom we get absorbed in as underplanting. The best illustration I have of this point is the photograph on page 270. The area it pictures is comparatively small, but the effect of those particular trees seen across a lawn, with a foreground planting of tulips and a rock garden and pool at their feet, is amazing in what it accomplishes. There may be a busy street just outside the belt of those trees, but you would never be aware of it. The tall spruces afford protection from high winds, and are cooling to look out on and refreshing to the air in sultry weather.

Here you get them in perspective, and because they are planted partly in back of one another you think they recede, as a grove, much farther than they actually do. The flatness of everything in front at the left emphasizes the height. The other amazing effectiveness in the tree planting here is in the combination of spruces and birches, massed for contrast in foliage, color, form and texture. The white birches are fairylike against the somber, columnar spruces.

There is much to be said for having large trees along a property line, with small trees or shrubs that contrast with them in a significant way inside. As a refinement of the planting scheme, but of secondary importance, you can work out delightful ground covers and rock plants beneath them.

TREES GIVE COHERENCE TO A PLAN OF TERRACES ON SEPARATE LEVELS. One of the hardest jobs a landscape architect ever faced was to develop the long narrow strip of property, stretching down a steep slope to the Hudson River from the street level on which stands Mr. and Mrs. Charles MacArthur's Victorian house. The way Mary Deputy Lamson solved this problem is shown on the panoramic picture on page 271. It is done in a series of terraces, each the width of the property, each with a different interest, but with trees as the relating elements giving coherence to the plan as a



Photo by Mattie E. Hewitt.

191. Spruces and white birches planted for contrast at the Mount Kisco, New York home of Miss Anne Morgan and Mrs. William K. Vanderbilt. Garden architect, Nellie B. Allen.

whole. The gardens and pool are both horizontal layouts, balanced in form and placed where they can be seen to advantage from the top level. The tennis court, also horizontal on the plan, is hidden from view from the top by a deep drop in grade. The orchard and woodland planting on the last two levels merge from the formality of the first terraces down toward the natural effects along the river front.



Photo by Richard Averill Smith.

192. Panoramic view of the terraced hillside at the Charles MacArthur home in Nyack, New York. Landscape architect, Mary Deputy Lamson.

The house itself is Victorian, and the pergola has been beautifully designed with that in mind, likewise the bathhouse described on page 213. The whole layout would seem forced and too formal for modern taste without the large trees, many of them planted in the Victorian era, such as the sugar maple at the top of the steps next the house. An old pine, moved from up near the house where it was in the way of the new driveway, calls attention to the left of the picture, and the old pear tree with wistaria climbing over it is the high spot of the terrace given to a rose garden with tulips in the center beds in spring. Around the pool, peach trees were originally planted but they have died and been replaced by dogwoods. The effect is equally good. The trees planted in the series of terraces are a most important part of the design. By reaching up as they do from a lower level to a higher, they help connect the otherwise sepa-

rated units. They ease the change in grade, keeping the panorama from being flat planes piled on one another. Because of their rounded forms they maintain interest and provide the foreground for distant views all through the garden, which would otherwise have interest for the most part only down through the center.

UPKEEP OF TREES AND SHRUBS. Trees and shrubs have to be sprayed for diseases and various pests. Dead branches have to be cut off. Pruning is necessary to shape trees and keep suckers down. The cuts should be made with care and the scars coated with tar to prevent decay. The pruning, if left to the usual tree experts, is often not done with any idea of the landscape value of, perhaps, a lateral branch that is not exactly symmetrical but is exactly right for the position in which the tree is located. Watch your men at work or have a landscape architect direct them, to avoid having them reduce the individuality of your tree shapes to a standard type. Pruning is an art as well as a science.

Everyone knows that newly transplanted trees and shrubs have to be watered. After a few casualties, one learns how much and how often and for how many months after the moving this watering has to be done. It is not enough to water the roots of evergreens that have been moved. The whole specimen has to be sprayed with a hose at certain times of day at intervals for months after the transplanting, unless the season is rainy. Large trees just moved need guy ropes and stakes to protect them against wind. Trunks and lower branches may have to be wound with burlap until the trees become established.

Then there is the mulching and feeding of shrubbery and trees, on which much material is given in garden books.

The care that this brief sketch suggests must be counted in one's garden budget for time and expense, or neglect will creep up on you. But a few good trees and shrubs are worth the trouble, and the care can be distributed over a longer period, at less frequent intervals than would be the case in the upkeep, say of a rose garden or a perennial border, which requires frequent attention all through the growing season. As compared to the need of a gardener a day a week for the latter, you might need a man once a month to help with trees and shrubs if you cannot do it yourself.

PLANTING FOR FALL AND WINTER EFFECTS FROM THE HOUSE. There are times in any climate when we cannot stay outside the house as much as we would like. At such time we relish more than we can foresee whatever we have planned for its beauty in the so-called off seasons, as part of the landscape setting seen from inside. Then is the time when the supreme test is made of the structural design that underlies the planting. If the walls,

enclosures, paths, surfaces, and the architectural features such as arbors, gates, steps, etc., are not well designed in themselves and as an integrated whole, the defects are evident.

The first essential is to have good structural outlines and shapes, in terms of shrubs, trees and walls to give the plan coherent form above ground level, so that it does not depend on annual and perennial plants which die down to nothing in winter.

The second essential is to learn to appreciate the kind of beauty that we can have in off seasons. It is different from summertime beauty. You cannot achieve it in the same way. Greenery and bloom, instead of being the rule are the exceptions. Make them exceptions that stand out. Do not suppose your only solution of winter effects in the north lies in terms of evergreens.

What then are the other possibilities?

First of all, winter landscaping consists of outlines minus leaves so far as natural deciduous material is concerned. In terms of line, great variety of beauty is afforded by trunks, twigs and branches. In terms of color they offer equally subtle variations of study, from the silver of Siberian elm to the chalk color of the white birch and the black of ironwood. I, for one, prefer the red-twigged dogwood glowing against a winter sky to the covering, withering, half-frozen effect of rhododendrons in a New England January. I prefer the green stems of *kerria japonica* outside my door to the dead-looking brown of certain junipers in winter. I much prefer a high-bush blueberry with its density of tiny twigs to any evergreen shrub that has to be boxed or burlapped or otherwise protected in winter.

We have a new set of values to work with in northern falls and winters. Earth colors are in the blonde pastels of dried grass or in the dazzling white of snow, the reverse of summer. Browns instead of greens predominate in the horizon. Trunks have textures we rarely appreciate when trees are in leaf—shaggy in the hickory tree, shiny in black birch, wonderfully patterned in the sycamore, eroded and perforated by woodpecker holes in old apple trees. Instead of the blossoms of the wild rose, we have its globules of red haws. Vines like honeysuckle are a tone poem of bronze and green leaves and black berries until late in winter in many localities. Against all these elements, a single pine stands out with unexpected freshness and strength. If we simply mass evergreens and call that our solution of the planting problem in winter, we have lost half our opportunities for winter beauty.

Against a lilac hedge as seen from my living room window, graceful specimens of *genista tinctoria* lead up a path to a cedar tree. I am surprised each year at the way this native broom holds its little shiny green leaves past midwinter (and then takes its time about leafing out in the late

spring). Many are the shrubs which, because of yellow or green or reddish or purple branches and colored berries can be built into winter landscaping. (See the list of deciduous material on page 350.) Jetbead, bitter-sweet, *viburnum tomentosum* and the multiflora rose, with its ruddy mass of tiny red berries arching over the stone wall at the road, are effective with me. I stress the deciduous material because it is not stressed enough as a rule. It does not in the least signify that we should ignore the manifold possibilities of combining it with the evergreens.

TREES AND SHRUBS IN A CALIFORNIA PATIO. Even in a climate of winter sunshine like California, trees and shrubs play important parts in maintaining year-round interest, with little maintenance, in the intimate plantings around a patio. The Byrne patio in San Francisco, shown on page 121, is planted with this idea in mind. There are annuals in front of the beds you see around the inside walls, but the mainstays of the garden are the free-standing oaks in the yard and the beautiful flowering pink dogwood and flowering fruit trees—cherry, pomegranate, pear, apricot and crab-apple. At the right, next the house, are evergreen shrubs—Myers lemons and azara. Many of the shrubs across the rear of the patio are similar to those we use in the East—*magnolia stellata*, *viburnum burkwoodi* and *spirea prunifolia*, with *viburnum Carlesi*, beloved for its fragrance, a large standard wistaria, a flowering quince of a coral color, and a variety of mock orange at the left side of the yard. With these are shrubs that, in the East, die down in winter, such as buddleia, or are too tender for us to grow outdoors, such as French cutleaf lavender bushes, the banana shrub (*michelea fuscata*), *dauventonia Tripetii* and *coprosma Baueri*.

Watering is essential, and a certain amount of cultivation and fertilization. But the care is little compared to what these beds would require if planted wholly to flowers. The trees and shrubs have been chosen for their blooming value as well as their structural forms.

TREES, SHRUBS AND VINES FOR SUCCESSIVE GARDEN INTEREST. If you want to experiment with the kind of planting around your living areas in which flower borders are minimized and trees, shrubs and vines are chosen for their succession of bloom, their berries or fruit in combinations that afford interest, your greatest effort lies in the selection and distribution of such material. The follow-up care is not arduous. It is not easy to plan your scheme so that this landscape material does not all have its greatest interest at once or in one section of the grounds.

A landscape plan for an acre along the Delaware River is shown as a well-organized layout on page 147, with trees and shrubs located and chosen for a design function, as explained on page 146. Here, on page 275, the same house, terraces and grounds are shown with the specific planting

indicated. The landscape architect selected the material primarily for its structure or anatomy which is of first importance but with an additional purpose in mind of having the planting interest follow the calendar from May to September. The chart to follow includes the designer's description of the way the plan works out and its advantages.

Seldom does one find a planting scheme yielding more returns from the large-scale material. It should make us ask ourselves why we do not apply to the selection and distribution of trees, vines and shrubs the same thought we give to the selection and distribution of annuals and perennials.

AROUND THE CALENDAR IN A SYMPHONIC PLANTING SCHEME *

Designed and Described by James C. Rose, Landscape Architect.

THEME

- | | |
|--|-----------|
| 3 Giant Arborvitae, columnar form (in a far corner of the turf panel south of the house) | Evergreen |
| Dwarf Japanese Yew hedge (around part of the turf panel) | Evergreen |
| 5 Douglas Pyramidal Arborvitae (outside the far end of the wall backing the north terrace) | Evergreen |

"The recurring theme, the melodic subject developed with variations in our landscape symphony. . . . These are the constants which with walls and structure maintain the major form, balance, rhythm and division of space in which we live . . . the foils which emphasize seasonal variation, the harmony of which all variations are a part."

I. MAY—First Movement

- | | |
|--|-------------------|
| 3 Judas Trees (outside river wall, south of house) | Red |
| Japanese wistaria (near tool house south of house) | White |
| 5 Flowering dogwood (bordering one side of turf panel) | White |
| Chinese wistaria (on arbor south of living room) | Lavender |
| Arnold's crab-apple espalier (on dining terrace wall) | Pink |
| Tulips (bed against dining terrace wall) | Lemon |
| Naturalized bulbs (below the dining terrace) | Blue Yellow White |

* Consult the large plan on page 275 for the location of the evergreens marked E on that plan, and for the location of the items I, II, III, IV and V corresponding to the items listed here under the headings of I May, II June, III July, IV August and V September.

"Before the leaves unfold, horizontal layers of white flowering dogwood and the lean branches of redbud combine with lavender and white wistaria. Delicate blossoms of the espalier crabapple and lemon colored tulips against the white walls of the north terrace...naturalized bulbs in rough-cut grass along the outcrop beneath the red oak and honey locust. This is the first movement. Spring!"

II. JUNE

1 Yellowwood tree (on driveway)	White
Mountain laurel (in rough grass below north terrace)	White
Rugosa roses (on beach)	Red
Flower border (south of house)	Varied
Iris (bed against wall—north terrace)	Purple White

"Fresh leaves hang lightly on deciduous plants...White racemes, like wistaria, against the dark foliage of yellow-wood trees...Roses bloom on the shore and mountain laurel covers the outcrop...The perennial border looks its freshest...Yes, it is worth the struggle. Look at the white and purple iris along the breakfast terrace!"

III. JULY

7 Oxydendron (along drive)	Cream
Clematis (back of tulip bed)	Purple
Trumpet vine (below breakfast terrace)	Orange
Flower border (one side of turf panel)	Varied

"Summer. It's here again! The completeness of foliage. Along the drive creamy white clusters, like lily of the valley, nod in the breeze against the picturesque form and dark foliage of the oxydendron trees. Purple clematis replaces the tulips against the white wall of the breakfast terrace, and a trumpet vine is just beginning its solo not far below..."

IV. AUGUST

Hedge Rose of Sharon—flower (along drive)	White
Mountain ash—berries (near dogwoods south of house)	Orange
Dogwood—fruit	Red
Flower border	Varied
Rugosa rose—fruit	Orange
Morning glory—flower	Blue
Porcelain ampelopsis—berries	Blue
Espalier fruit	Yellow

"Good planning pays it dividends. The whole world is moaning about the heat. Our neighbor complains of his ragged garden and says it is more trouble than a woman's hair-do. Now we are thankful for the evergreens, the clean straight lines of the paving, and the walls which look as fresh as ever, keeping their form without any effort from us. We are thankful that the flower border is raised and we don't have to stoop so far; we are glad it is small enough for us to keep trim during this weather. The rose of Sharon hedge along the drive reminds us that spring is not the only time for ecstasy.... Porcelain berries hang like miniature grapes from the cantilevered arbor over the terrace. Heavenly Blue morning glories weave a delicate pattern outside the glass wall we pass coming down the ramp for breakfast. They stay open until mid-afternoon here in the shade. The birds are eating dogwood berries. The mountain ash is just coming into its exotic brilliance.... These are the large full notes of our symphony. Let's take a swim and play along the beach.

V. SEPTEMBER—Finale. Autumn Color.

Yellow-wood tree	Yellow
Judas trees	Yellow
Dogwoods	Red
Mountain ash—berries	Orange
Oxydendrons—fruits and foliage	Tan and Deep Red
Porcelain Ampelopsis	Blue
Espalier crab-apples	Yellow
Rugosa rose	Orange

"The finale that raises us out of our seats to pay homage to something not man-made.... Men can create beauty but they must wait for sublimity. ... Along the drive the red of the oxydendron, with its tan fruit in graceful capsules might be vulgar at any other season. The crisp twigs of the ampelopsis vine make fantastic patterns on the terrace wall. The gaudy ash berries pale against dogwood red. The smooth trunks of Judas and yellow-wood trees, like young, lean muscles, bear the peroxide wig of a surrealist's dream. Along the beach the rugosa rose has dropped a fruit, and the wind scares up a shrill crescendo. The beat of the evergreens, like tomtoms, holds the mounting wildness to its theme."

AND THEN

"We have the silhouette of trees. Now and then the bare forms blossom with winter snows. The evergreens continue with the silent rhythm of sleep,—until spring...."

NATIVE MATERIAL IN AN ARCHITECTURAL PLANTING SCHEME. One ingenious way to cut down upkeep connected with planting on one's grounds, is to use fool-proof, indigenous material you can be sure will grow on your soil in your climate. Incidentally, it is usually inexpensive and may even be dug up from waste lands in the vicinity. The owner and architect of the modern home in Jacksonville, Florida, shown on pages 79 and 81, has used native material but not in the loose, open groupings it assumes in the wild. He has tailored it to an architectural scheme.

Clipped hedges are used, in neat, straight lines. This is shown in the hedge of swamp myrtle (*myrica cerifera*) at the left of the covered porch, a hardy evergreen southern shrub. The evergreen hedge *podocarpus macrophylla* outlines the area between the house and the garage. Other hedges are of clipped bamboo. Local dogwood, instead of being used as a yard tree, is trained espalier fashion outside the house walls here and there.

To provide a wind screen, or baffle, down near the river and also to reduce the glare from the water in midwinter when the sun is low, cherry laurel is planted in Z-shaped beds. The passage from the garage to the house on the upper level (see plan, page 79) has the native evergreen shrub *ardesia* planted in urns. This was chosen for its profusion of bright red berries nearly all year round.

The steep slope below the living room has been graded into a series of flat terraces which can be enjoyed from the house above or from the open paved terrace below, and is thus well utilized for a garden. It is one of the characteristics of the modern home to locate garden material close to the outdoor terraces. Here the owner has used specimens of the Kurume azalea in flame, salmon, crimson and white, bordered with the grass-like lily, liriopé. They are the mainstay of these stepped plantings, which repeat the horizontals of the flat roof but have the beautiful old live oaks for vertical forms of pleasing natural shapes in contrast to the trim design. An aspiring hickory shows its massive top over the roof of the house.

The strictly architectural scheme of the planting is far from the only way to plant around a modern house, but in this case it is effective and the choice of native material for it has merit.

PLANTING AROUND TERRACES, PATIOS AND PORCHES. Wherever people are sitting out-of-doors close to planting, it should be limited and controlled. It should not obscure vistas, it should not be so massive or congested as to make people feel uncomfortably crowded. It should have some interest of its own that suits its location. Thus, in the California patio shown on page 19, the open space for people to sit is the important element. The landscape architect has wisely limited the planting to a single jacaranda tree, to tie the house down, and to no more vines and shrubs than are

needed to make delicate shadows and silhouettes against the white wall. The special interest is the star-shaped pool with the low curbing, around which are pots of white geraniums, fuchsias and century plants.



Photo by Silvia Saunders.

194. Terrace at the home of Mrs. Frances King in South Hartford, New York.

SMALL-SCALE PLANTING ON A TERRACE. In Mrs. Frances King's home in South Hartford, New York, the view from a slope called for the development of terraces on which to sit and enjoy it. (See above.) The steps here between levels are most engagingly planted with closely-clipped privet in the shape of masonry piers at each side. It is so much pleasanter than stone, because the greenery affords contrast and is a splendid instance of bringing small-scale planting into the terrace for a design function. The main terrace has a high retaining wall with a shade tree below it as a backing. An arbor is built into a corner of it. Paths half-screened from view by shrubbery lead to perennial borders at the side. One of its delights is the use of little stepping-stone plants in the crevices of the pavings. Sweet alyssum seeds itself here and blooms its head off. Small-scale planting of this sort is often wasted in distant gardens but most useful on terraces where you spend time close to it.

AN UNUSUAL TRELLIS FOR VINES AND DELICATELY SCALED SHRUBS ON A TERRACE. Another example of both large and small scaled planting used

with restraint on a patio terrace is shown on page 11. A large existing post oak and large red oak were carefully preserved as shade trees for this Georgia patio, but they in no way obscure vistas. The interest here is in the use of clematis and wistaria vines on trellises designed with great distinction, not simply to support the vines but also to accent the architectural lines of the low roof and door openings. They are therefore integrated into the construction by extending from the ground level to the roof and along the eaves, and make the planting also tie into the lines of the house.

The shrubs next the house have been chosen for their delicate scale so they will remain subordinate to the mass of the house and the open spaces of the paving. They consist of *ilex Bufordii*, eleagnus, shrub roses and St. Johnswort.

FLOWER BEDS ON TERRACES. I hear many people who would like a flower garden say that they go away with their children for almost the whole summer and so they could not take care of the usual perennial beds, which have to be extensive to be effective out in the yard. For such people, small flower beds on a terrace, devoted mostly to spring bulbs or early summer plants such as iris would be a happy solution. They do not require as much weeding as large beds do, adjacent to a lawn. For instance, in the patio shown on page 19, next the door into the dining room baby primroses and iris are planted at the foot of an espalier Japanese quince bush. In the plan on page 44 designed by Joseph Shilowitz there are raised flower beds around the edge of the terrace.

The roof terrace outside a penthouse in England, designed by Maxwell Fry and Christopher Tunnard features a concrete plant trough with drainage to concealed gullies, and asbestos plant boxes which are light and inexpensive to cast. These boxes are raised on teakwood feet and are drilled to allow drainage. The planting is of a permanent character, with some annuals and bulbs for spring and summer color. A glass screen shields the plants from wind but allows light to penetrate. There is space for people to exercise at the right of the flower beds. The whole scheme would be equally attractive for a terrace at ground level.

A RAISED BED AND ESPALIERED FRUIT TREES ON A TERRACE. On one side of the Richard S. Humphrey house in Brookline, Massachusetts, two terraces have been built out to overlook the brook. One of them is at the rear of the new garage wing built with the American Gothic style of pointed windows that accord with the old house pictured on page 88. A large crab-apple tree at the step where the two terraces adjoin was dropping its petals when the picture on page 282 was taken. At the far end of the terrace is a most interesting specimen of the camperdown elm with its

characteristic crown of gracefully drooping branches, the result of grafting a straight elm stock. A low box hedge borders the terrace.



Photo by George H. Davis Studio.

195. Terrace behind the garage at the Richard S. Humphrey home in Brookline, Massachusetts. Landscape architect, Bradford Williams.

The chief problem confronting the landscape architect here was the awkwardly high concrete foundation of the garage wing, due to the fact that the ground level at the rear of the garage is lower than at the front. The gap between the ground and the siding of the garage has been bridged and the apparent height of the garage reduced by a raised bed of flowers, brought out fifteen inches from the cement foundations and bordered with a dry wall of old cobbles of varying lengths. Shrubbery in the bed would have arched out over the terrace and taken up too much space. The fruit trees espaliered against the wall are the appropriate solution to give height and keep in scale. Below are tulips in the spring, dwarf zinnias for summer bloom and Korean chrysanthemums for fall with ferns and rock plants as fillers in between.

A LANDSCAPE PLAN BASED ON TREES AND SHRUBS. The small units of planting that can be shown in pictures give us glimpses into the special uses that landscape material can serve. But only by studying complete landscape designs can we get the relationship between the various areas, from

inside and outside the house, see how the circulation is directed and understand how important to the design are the single specimens and groups of large-scale plantings discussed in this chapter. On them chiefly depend the enclosures, the high points of interest and the screenings in the different areas. On them depend the individual effects that varied combinations of material can give.

In the landscape plan by Daniel Urban Kiley, shown on page 283, all the living areas inside and outside the Georgian brick house located in the north half of an odd-shaped property in Massachusetts have been developed with trees and shrubs. You will find it reflects the modern trend to minimize upkeep, to provide recreational facilities close to the house, to avoid stiffness and formality and to make use of existing and new material in dynamic arrangements. Each open area has its own individual setting, developed with height, depth and breadth sustained by the forms of trees.

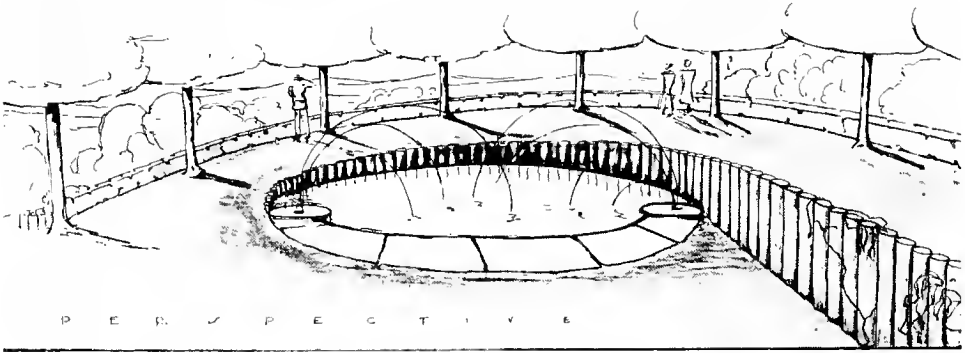
The topography of the ground was a controlling factor in locating the house on the highest section of the lot, where it commands a view to the east and toward an artificial pond at the northeast corner of the property. There were many existing oaks and pines on the place which suggested woodland planting in the design. The forecourt has, in the island between the entrance and exit drive, four red maples formally planted to accord with the formal portico. A hemlock hedge borders the road.

To the right below the forecourt a broad lawn extends to a pine grove where birches and blueberry bushes contrast with pines. Moss and pine needles are the ground cover. On the other side of the grove is a circular lawn, bordered at the outer edge of the property by sumac, flowering dogwood, cotoneaster and flowering cherry trees.

THE BIRDBATH. The chief attraction of this circular area is the birdbath, a shallow saucerlike pool at the base of an incline with turf steps around half of it and flagging overhung with ivy and mountain laurel around the other side. The birdbath is not isolated but is tied into the plan by its location at the left of a curving turf ramp connecting with the south terrace and south entrance of the house.

THE CHERRY SWEEP, POND AND GLADE. From the east terrace an avenue of cherry trees leads you out on a curving axis, a fascinating feature. It is six feet above the surrounding ground level at the terrace end and slopes down gradually to the end of the spiral curve, terminated by a round reflecting pool. See the sketch, page 285. Jets of water play into this pool. The retaining wall of upright posts, as shown in the drawing, following the grading down of this easy descent is most interesting. The feature as a whole is an instance of molding a slope into a landscape treatment that

makes use of the ground cut away at the sides of the elevated avenue to grade it evenly all the way down.



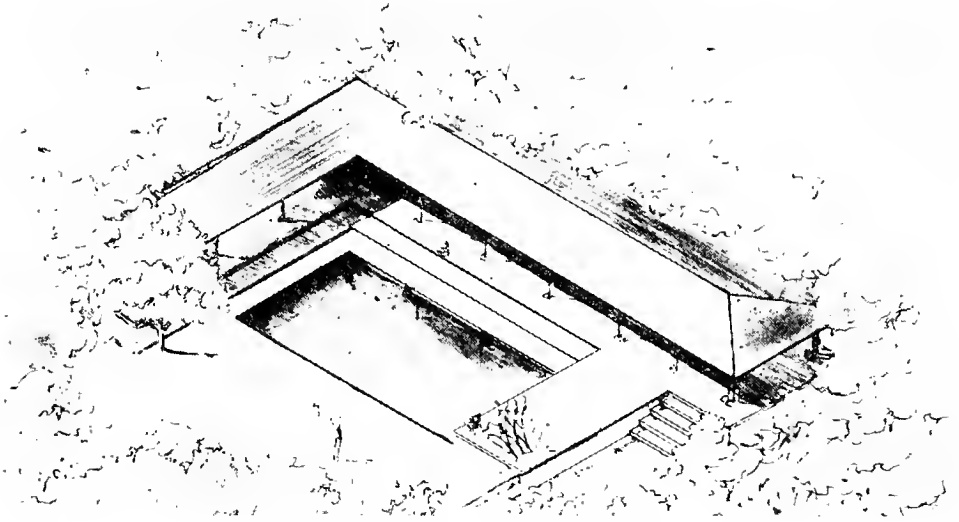
197. Sketch of the spiral curve and pool of the Cherry Sweep at Waverly Oaks, designed by Daniel Urban Kiley.

The reason for curving the end of the sweep is evident from the opening in the planting toward the pool, where two huge existing oaks act as the foreground elements in a fine view of the pond, the existing white pines at the right supplemented by rhododendrons, leucothoe and laurel. These evergreens not only focus the outlook toward the pond but also serve as a boundary enclosure for this corner of the property. The next scene to open up is a woodland glade leading up from the pond and almost concealed from the cherry sweep by the intervening planting of oaks, azaleas, and yews. It is intended as the outlook from the extension of the house terrace which borders the game lawn on the east.

THE RECREATION AREA. The bamboo pavilion described on page 218 and sketched on page 286 terminates the recreational area at this side of the house. It is built around two sides of the oblong swimming pool at the north end of the game lawn. All of this is in view of a large brick-paved terrace outside the living and dining rooms of the house where shade can be enjoyed in the heat of midsummer. Here next the terrace are flower boxes for the whim of the owner. It is the only attempt to bring flowers into the planting scheme.

THE SAND GARDEN. Instead of a flower garden there is a secluded sand garden opening off the west wing of the bamboo pavilion. It comes as a surprise after the extensive views in other directions, and is a good protected out-of-the-way place for small children to have fun. The sand is a pleasant relief from the usual turf. Gray leaved plants such as thymes, with the varied greens of cotoneasters, the spreads of ferns and the blue blossoms and bronze foliage of one variety of *ajuga reptans* all show up

around the sand better than they would around a grass plot. An Oriental feeling of line and color is provided by the picturesque cryptomerias, the ginkgo tree and the flowering cherry tree. In the shade of birches and one of these specimen cryptomerias is a curved seat.



198. Sketch of the swimming pool and bamboo pavilion at Waverly Oaks, Massachusetts. Landscape architect, Daniel Urban Kiley.

Toward the service yard and street, white birches, hemlocks and rhododendrons are located casually to follow the boundary enclosures. The starry magnolia which bears fragrant blossoms before its leaves unfold could not be better placed. Note the use of a hemlock hedge along the street, evident on the plan on page 283. The forecourt and service yard are enclosed by brick walls, to repeat the material of the house.

THE PLAN IS DYNAMIC. With the Georgian brick house as a radiating center flanked by terraces from which to explore the special interests of each exposure, you have now gone over the main outlines of the design and the planting. The design is simple, but expresses power and imagination unusual in a piece of property about four hundred feet square. But why not have sweeps and ramps and spirals, curving axes and sand gardens, groves and glades in a dynamic unforced plan that extends space instead of arbitrary garden patterns that limit it to so many static oblongs we can take in at a glance? Just as a design that minimizes upkeep, it has merit. But its greater merit lies in the designer's originality and sensitiveness to what fits the existing material and the topography.

While we might think a game lawn, swimming pool, pavilion, play-garden and terraces enough to satisfy outdoor interest, the whole treatment here makes such exciting use of trees and shrubs, contours and water, that it opens our eyes to a conception of landscaping not as a conventional way to fill up the gaps between exterior areas for use, but as the way to contact the magnetic force that impels us to live out-of-doors.

CHAPTER XI

WATER IN THE LANDSCAPE

FOR PRACTICAL PURPOSES water was first introduced into outdoor areas around homes in the form of water holes, wells, irrigation ditches and basins or pools from which water could be dipped into jars. Then people began to find some form of water acceptable for human enjoyment as well as a practical necessity to soil cultivation. On this page is a picture of a dipping pool in a fruit and vegetable garden in the suburbs of Mexico City, with its irrigating ditch in use today when the pool is allowed to fill and the earth dykes are opened. This house is said to have been built by Pedro de Alvarado, one of the Conquistadores.



Photo by Silvia Saunders.

199. Dipping pool and irrigating ditch in the fruit and vegetable garden of Casa Alvarado, in Coyoacan, Mexico.

Whether or not this dipping pool dates back to Alvarado, the tradition behind it reaches back to the most primitive use of water and affords interest to us today. The pool, lined with rocks, is at the base of an old cypress tree. You can see the spikes of acanthus growing up against the trunk. Marigolds grow in a patch behind the pool and fruit trees are planted

near. Peas started on brush are on one side of the ditch and raspberry bushes on the other. A lemon tree, iris, asparagus and herbs grow across the pebbled path. Ferns and violets grow under the tree toward the lawn and line the canal that connects with the old well (page 299) at the rear of the terrace.



Photo by Silvia Saunders.

200. Fountain in the music room of the garden in Guadalajara, Mexico, designed for T. Ochea Reyes by Ignacio Dias Morales.

THE ENCHANTMENT OF WATER IN A MODERN MEXICAN GARDEN. Where water trickles or gushes or cascades, or where it spurts from a jet or splashes from one level to another, it has sparkle and movement to add to the landscape, sound to enchant the ear and refreshment to lend the air. No wonder the hot countries feature running water in the outdoor havens they design for human use. I found it the chief but by no means the only interest in a small city backyard in Guadalajara, Mexico, designed by the talented modern architect, Ignacio Dias Morales, who took me to see it. The yard is somewhat irregular in shape and there were fruit trees to build around.

The main entrance, down two steps from the house (see the picture above) is next to the roofed corridor under an old apple tree, which serves as a shady sitting room in the heat of the day and commands a

view of the second section, the music room below, where the fountain plays.

The central fountain is of gray sandstone, simple and modern in design but suggesting, with the urn and minaret top, something Byzantine. The shallow pool beneath it is inlaid in brilliant green tiles which curb the runnels that proceed from it, lined with blue and yellow tile. These runnels evaporate water, cooling the air as they continue on their way around lemon and pomegranate trees in old Moorish fashion, and drain into a bathing pool in another part of the garden. They also take the overflow when it rains or when the paving is washed.

Plants in earth-colored pots, one hundred and fifty of them, are set about the garden and respond better than beds of flowers would to the city environment. In February, when I saw the garden, azaleas in every shade of red and white and pink were in bloom around the pools. Niches held larger jars of vines, cactus and foliage plants. Roses climbed the walls of cream-colored concrete enlivened with the brick-red roof tiles of the house. The windows and doors were outlined in purple-blue paint. This color, with the gray and orange and green and tan concrete benches, the balustrades painted orange with blue and olive-green finials, and the rich blended coloring of the paving, as beautiful as an Oriental rug, all fitted together into a little Moorish masterpiece of gem-like color.

I learned that this city was founded in the sixteenth century by people from Andalusia in southern Spain, where for eight hundred years the Moors, with their blend of Persian, Arabic and Oriental traits, had held sway.

"Here in Guadalajura with our hot sun, as in old Andalusia, it is important to have open spaces in which to live," Mr. Morales said. So his conception of the livable garden with an imaginative Moorish atmosphere was understandable. But to work it out, he had used nothing not available in the vicinity. The glazed bricks paving the corridor, the cement and the vari-colored tiles are all native products. Expert woodcarvers turned the balustrades, and stone cutters carried out the fountain design. But the carpet-like paving was what delighted me. It consisted of unglazed, faded red bricks laid in diamond shaped motifs, two to each diamond, alternating with similar shaped units made of black pebbles set into black concrete. A border of small white lamb bones outlined the diamonds in the design.

The casual way in which all the details were designed contributes to the room-like quality the designer had in mind, and justifies me in saying that in it the Spanish-Moorish love of fountain, canal and pool, as old as the history of civilized man, has come alive in a creative setting.

A LIVABLE SETTING FOR POOLS AND FOUNTAINS. There are plenty of books available on how to build a pool or an artificial brook or lake, but no one

in books can tell you where to locate the water in your particular setting. That is something you or your advisor must decide. Books and pictures, however, can inspire you to make it the heart of your outdoor living area. They can help you to avoid the mistake of having this area in one location and the water that would add so much to your enjoyment in another, out of sight and sound. An amulet against evil is worn close to the person to be benefited. If your pool is to be an amulet against weariness of spirit, locate it where you can benefit by it and put inviting seats near it. The bench in the corridor of the Guadalajara garden is painted dull orange, with a gray, shaped band above it at the back continued down for the arm rest. The dividing line between the colors was incised in the concrete with a pointed stick when it was still wet. Note the recessed front below the seat to allow for foot room. As much thought has gone into the design and placing of the bench as into the details of the paving.



Photo by Ross A. Ross

201. Pool and built-in brick seat cushioned in woolly thyme, in the Benjamin Follett garden in Hillsborough, California. Landscape architect, Butler Sturtevant.

In the California garden above the brick wall around one side of the patio has a brick seat built into it, cushioned with plants of woolly thyme, which tempts one to linger near the six-sided raised pool also built into the wall. The lucid surface of the water is a perfect contrast for the

texture of the old bricks. Note the platform built around the base of the pool, partly to break up the height and also to range pots on.

Pools on various levels to emphasize the contours in Garrett Eckbo's backyard design on page 117 are well located to contribute to the pleasure of the people using the garden. The Long Island summer home shown and described on pages 7 and 154 has circular pools on the north and south terraces which are an integral part of the outdoor sitting areas within view of the dining room windows and doors. Since small pools are among the first possibilities for introducing water into the landscape, various kinds, shapes and positions for them need to be discussed.



202. Pool in the garden court at Mrs. A. J. Bale's home in Piedmont, California. Landscape architect, Thomas D. Church.

THE RAISED POOL NEAR THE HOUSE. Close to the house, in a terrace or patio, is a good place for any pool because it is likely to be seen more frequently in such a location, and because water is accessible from the house without much piping, which helps reduce the installation cost. Having a pool raised even a little above the level of the terrace keeps people from stepping into it accidentally in the dark. The two steps of brick around the brick pool, shown on this page, from Piedmont, Cali-

fornia, serve this practical need, and give room for pots to stand in relation to it. The interest such a small pool affords in contrast to the architectural structure of wall, shelf and plants on the terrace more than justifies the cost. Details of the paving are discussed on page 123. The built-in seat facing the pool has been constructed for comfort with a projecting front edge, a low back and ends so that pillows can be tucked against the corners to lean against.

Such pools as this need not be very large. If they have one or more jets of water they will create pleasing sound, but just as a still surface of water they are as important in an outdoor setting as a polished table in an interior. The flatness of the area is lifted by the form of the pool, and you can dip water from it without much stooping, an advantage when caring for the plants. Raised pools originated in the gardens of hot, dry countries long ago, for the very purpose of avoiding stooping when filling containers with which to water the garden. They can be incorporated into a design with raised beds of plants or shrubs around them. Study the plan of the Louisiana garden shown on page 159, in which a raised pool and connecting beds for perennials are the feature of one end of the garden, viewed either from the porch or the sitting area in the shade of the magnolia tree opposite the porch. The square pool is not symmetrically placed but is a part of the balanced design, with a raised bed the same height as the pool on the side nearest the center of the garden and a long bed six inches high on the opposite side.

The flower beds contain ginger lilies (*hedychiums*), the rain lily (*cooperia*), nerines; bulbous iris, clivias, the spider lily (*hymenocallis*), and native crinums, with begonias and verbenas added for long time bloom. A camellia bush grows in the bed near the rose garden, creating height and balancing the two oleander and azalea bushes across the path under the bathroom window. The planting is arranged so you can have vistas from end to end of the garden and still have a few shrubs to lift the level through the center of the garden.

The materials for raised pools are varied. Tiles may be used, set in concrete, or you can use brick sealed with hot bitumin. The brick pool in the James Fulton patio, shown on page 14, has a curbing of quarry keystone. The octagonal pool shown on page 9 is of this native Florida stone. The round fountain and pool in the courtyard of the house, shown on page 69, is a whisky distilling vat of cypress, sunk a foot below the ground level in a footing of concrete over gravel, with masonry applied all around the exterior. Lead containers or lead linings for small pools are very practical. Water-proofed concrete is often used, made tight either by a very rich mix of concrete or by adding waterproofing compound. As an example of a modern design for a raised concrete pool built against the curving con-

crete wall of a terrace, study Edward A. Williams's sketch on page 118, described on the same page.

SHIRLEY TEMPLE'S RAISED LILY POOL. At one side of the courtyard around the stone house where the Temple family lives in Santa Monica, California, is a raised pool of similar masonry lined with cement and designed as a segment of a circle, the inner curve repeating the outer one. The shape is unusual, and was made to accommodate the beautiful group of bushes in back of it, which had been growing there before the Temples started building. (See the photograph on page 295.) The landscape architect took advantage of these shrubs and placed the pool in front of them, shaped to repeat their broad outer curve. Seeing it makes one wonder why the sweeping movement and rhythm of curved lines are not more often seen in garden designs. In the pool are water lilies, arrowhead, water hyacinths and thalia. One should allow at least six feet as the length or diameter of a pool intended for aquatics. Pots of lavender, geraniums and petunias are set on the curbing.

Against a wing of the house a live oak was planted in a raised bed, because pipes had to run under it and into the house at this point. To wall in this bed and relate the tree to the terrace level, a stone seat was built which adds the casual, livable touch that comes from such organic necessities when the problem is well solved. It repeats the curve of the pool and invites one to sit against the high back to enjoy the pool and the planting of Christmas berry, gardenias, camellias, and the espalier apricot tree against the masonry wing of the house. *Arenaria caespitosa* grows like moss in the joints of the Ojai flagstone that paves the courtyard.

Near the pool is the picnic table, with its twin copper umbrellas, designed by the landscape architect, for shade. Without any formality of pretence, the landscaping of this outdoor terrace supplements the house as an ideal home for a child to grow up in, even so famous and gifted a child as Shirley Temple.

A POOL WHERE YOU DINE OUT-OF-DOORS. One of the best locations for any kind of pool is near the table where one dines out-of-doors. This is exemplified by the pool just described. The Wilcox's terrace (page 35) has an oblong sunken pool close to the breakfast and lunch table. The jets which play into it at each end are as agreeable as soft music when you dine. To anyone lunching in the patio shown on page 14, the raised pool suggests coolness.

The Stothart home in Santa Monica, California, has an interesting modern outdoor room (page 296). By glancing at the plan on page 210 you will see that this outdoor terrace opens off the living room and extends out to the boundary fence at the side. It has a refreshment bar at one end, and a rose



Photo by Clyde Stoughton, courtesy of House Beautiful.

203. Lily pool in the courtyard of the George F. Temple home in Santa Monica, California. Architect, John Byers; landscape architect, Benjamin Morton Purdy.

garden at the open end with a distant view of the mountains beyond. The pool is made of concrete and has a most unusual shape.

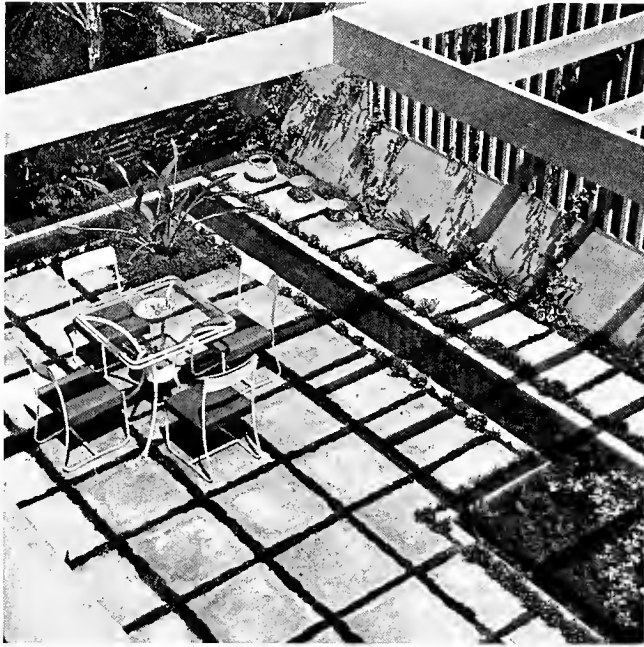


Photo by Ernest Ludwick.

204. Lily pond in the outdoor room of the Herbert Stothart residence in Santa Monica, California, designed by J. R. Davidson.

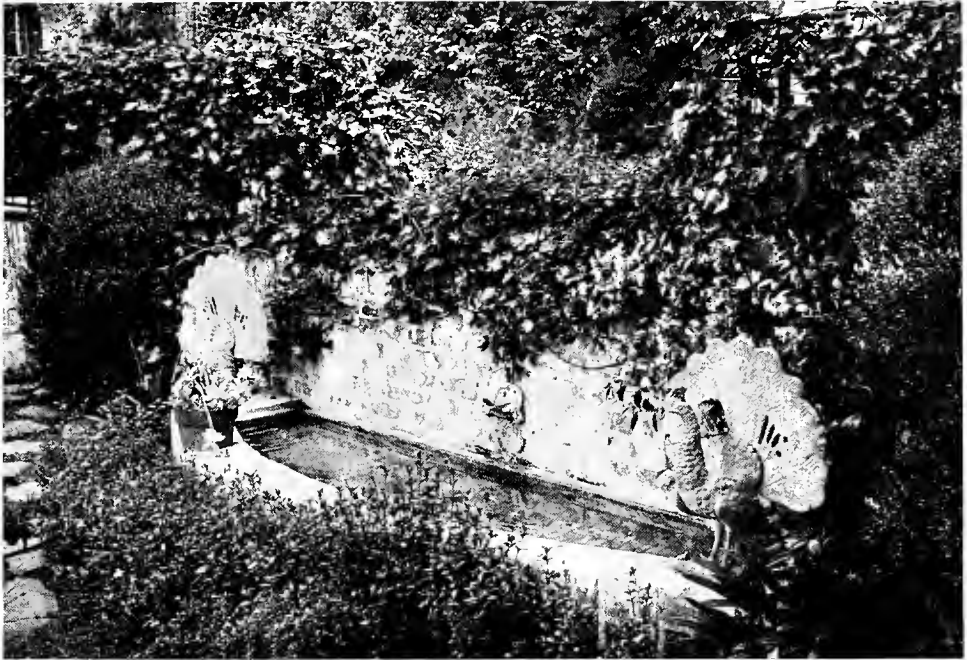
MODERN POOLS FOR MODERN OUT-OF-DOOR ROOMS. We have become accustomed to seeing either natural shaped pools, such as is shown on page 316, or symmetrically shaped pools—round, oblong, square, or octagonal. But there is no reason why an artificial pool cannot be geometric without having an exact symmetry. Modern houses are not symmetrical but are adapted to the interior use, without regard to formal balance. So why not a pool without formal balance, but with the shape of a given area, suited to the need it must serve?

In the Stothart's outdoor room, the designer, Mr. J. R. Davidson, wanted a little canal in which to grow water plants, but not a straight strip of water, which would be too severe and would not carry the effect of water around the whole area. Therefore it is L-shaped, and opens out into a wider rectangle at one end. Since space was needed for chairs and a table, the canal is placed off center, and the water is not crowded against the boundary fence because the canal would lose interest without the strip of paving beyond to give distance and spaciousness to the whole design.

The pool is sixteen inches deep to allow water lilies in boxes or tubs to

rest on the bottom and float their leaves on top. The bottom is painted black to give depth and repeat the color of the cement in the joints of the paving. Little edging plants border the pool. Against the interesting fence at the outside are vines and semi-tropical plants with variegated foliage, such as variegated ivy, wandering Jew and clumps of peperomia.

In the corners of the terrace against the garage there are square beds for Bird of Paradise plants. A single bed of this plant with a ground cover below is at the opposite end of the terrace in the angle made by the L of the pool. Here again balance is obtained without forced symmetry.



205. Wall fountain and pool in the Edward C. Harwood garden in Pasadena, California. Landscape architect, Ralph Cornell.

SHADED POOLS HELP COOL THE AIR. Often pools can be located in the shade of trees close to an interior or a porch or shelter, and greatly benefit the adjoining area by cooling the air and adding interest to the scene.

Just outside the floor-length window in the dining room of John Byer's California home is a lily pool (page 21). The pepper tree nearby shades it. As you look out of the window at any season you get the pool in a reverse view, so that it serves an indoor and outdoor purpose.

The one-story desert home shown on page 331 has as one of its unique features a reflecting pool at a corner of the house, shaded by the overhang of the roof. It is thirteen feet long, counting the extension of it below the

living room windows (shown on the plan, page 331), and not only cools the air in the porch and the living room but also mirrors the oleanders, the distant mountains and the sands.

A POOL AND FOUNTAIN AGAINST A BRICK WALL. Against a brick wall, where it can be seen from the garden, Ralph Cornell has designed an elongated, curving, shallow pool into which water spouts from the lead dolphin's head set into the wall. (See page 297.) A pair of stone peacocks are well placed, one at each end of the brick curbing, their tails silhouetted against the dark green of the ivy growing over the bricks. Both ivy and jasmine make a dense screen against the wire fence that tops the wall. At the base of this little fountain and pool are dwarf annuals and herbs. The rounded form of box at each end provides further contrast against the whitewashed brick and the paving.

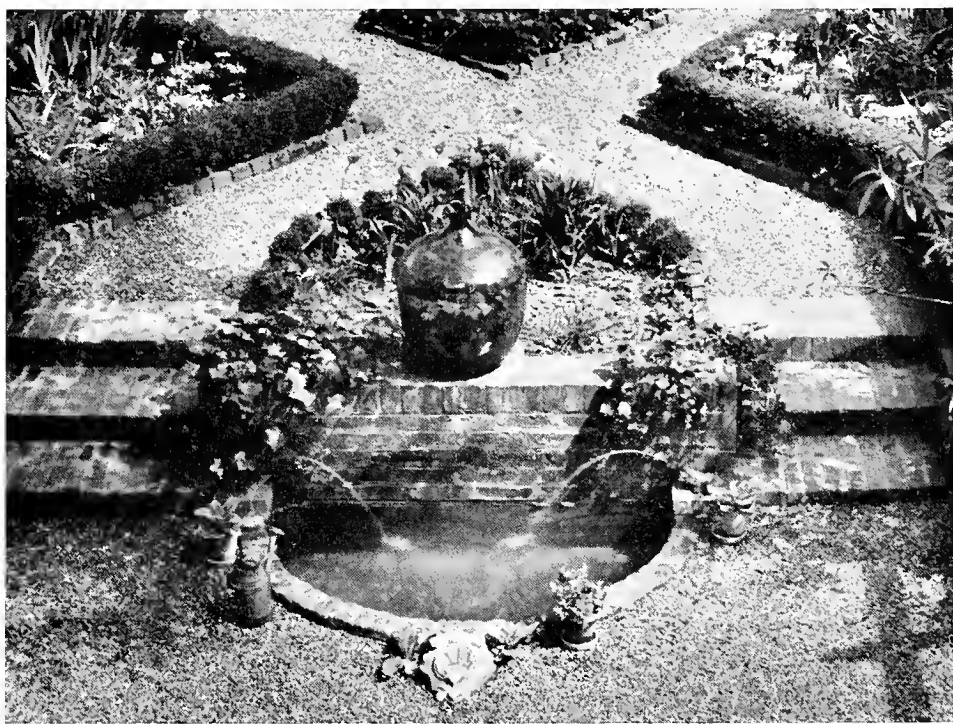


Photo by Silvia Saunders.

206. Small pool and jets in the Washington, D. C., garden of the landscape architect Rose Greely, designed by herself.

A MINIATURE POOL AND JET IN A BACKYARD GARDEN. In Rose Greely's narrow garden in Washington, D. C., the photograph on page 109 shows the view looking toward the house. Here above you see the view from the

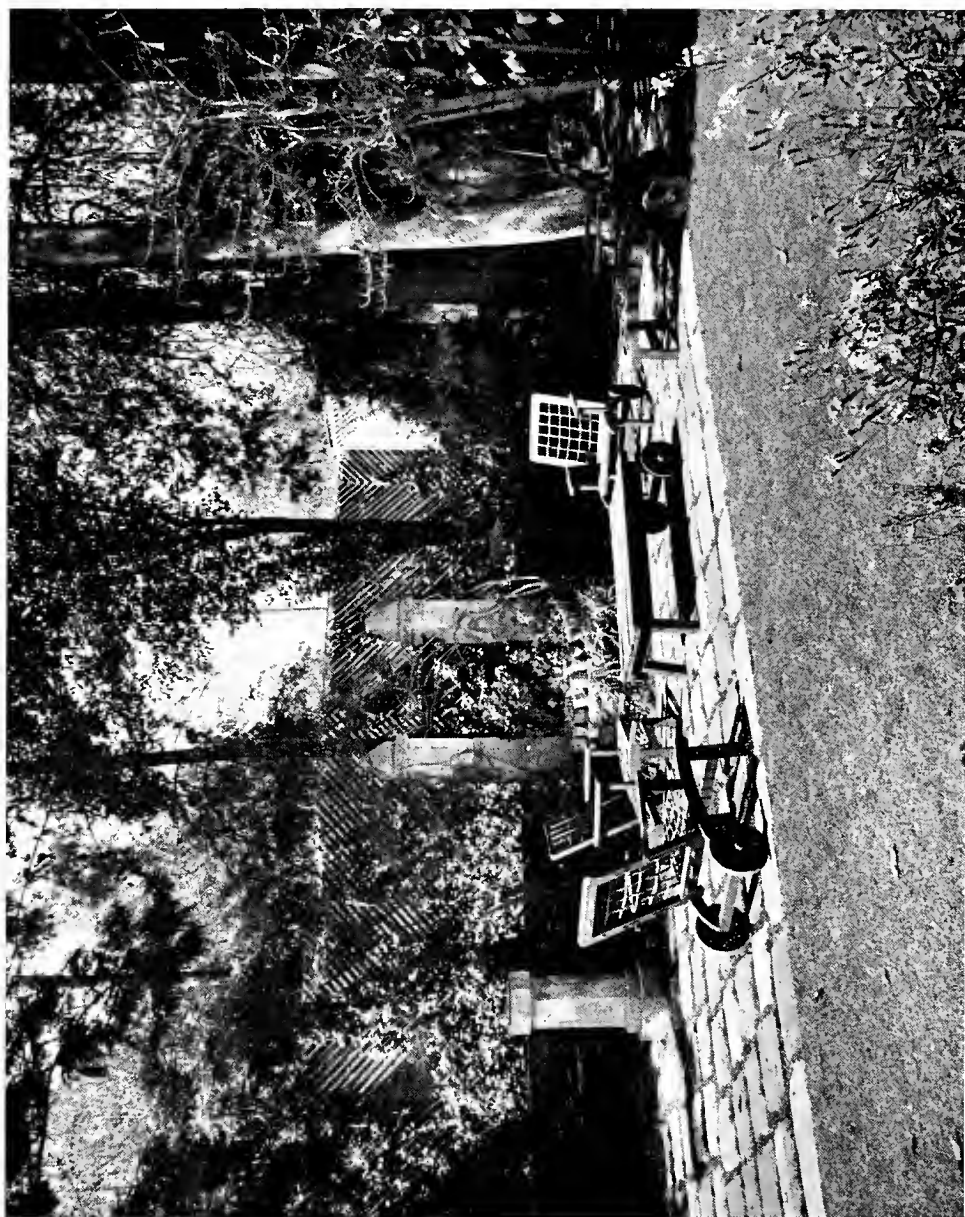


Photo by Silvia Saunders.

207. Terrace and ancient well at Casa Alvarado, Coyoacan, Mexico.

sitting area in the opposite direction. The delightful design of interlaced paths and planting includes a surprising little pool between two sets of brick steps which bring the path down to the terrace. Jets from tiny salamanders play into it. Ivy and box have a part in the greenery around the glass bottle and miniature plants in miniature pots border the front curve at one's feet. Before you discard water from your garden plans as too colossal an undertaking, remember that in some nook where everything can be on a small scale in relation to a little paved area, even a pool the size of a washbasin offers much charm.

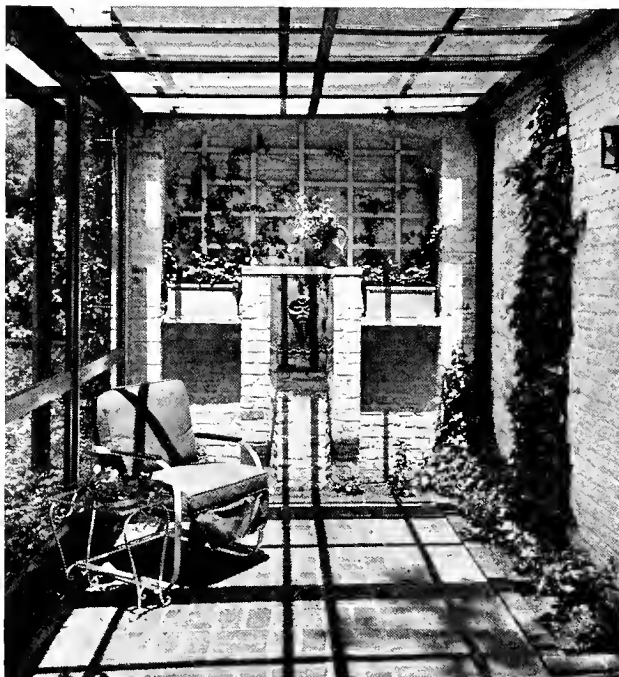


Photo by Samuel H. Gottscho, courtesy of House Beautiful.

208. Small metal wall fountain and basin in the screened terrace at the home of Mr. and Mrs. Lawrence Stern in Bayside, Long Island.

WELLS, TANKS, BASINS AND BIRD BATHS. If you buy an old country house, even though the well on it is not adequate for your modern interior needs, do not take down the superstructure and eliminate it as a feature before you consider what interest it might serve your outdoor terraces, granted its location is such that you could develop a living area around it. Often old wells were outside the kitchen door, and as we remodel we may make the old kitchen into a living room, so that the adjoining area is readily available as a terrace. Plants can be arranged around the curbing as a gathering point, and they might be watered from it.



Photo by George H. Davis Studio.

209. Bird bath and figure of St. Francis in the evergreen garden at Mrs. Frederick Brewster's home in Dublin, New Hampshire.

The ancient well between two brick and stucco columns wreathed in wistaria in the Mexican garden shown on page 299, has been utilized in this way, with a flagstone terrace laid in front of it, partly shaded by the cypress and datura trees at the right. There is no danger here of children falling into it, because it is surrounded with pots and has a screening over the top. One could have a padlocked cover until children are old enough to be safe, if the well-head itself is not sufficient protection.

The pleasure that some form of water adds to the outdoor setting may be obtained in several inexpensive ways. Various receptacles for water are often used effectively. Stone or pottery or metal cisterns, jars and basins for water have an imaginative appeal in connection with growing plant material. You see on page 300 a small simple lead basin made to the owner's order on a shelf of whitewashed brick at one end of the screened pergola. Water gushes from an opening in the lead mask above the basin. Ivy is trained up lattice supports on both brick house walls which form two sides of this livable terrace. A drain pipe from the basin is enclosed in the brick-work below the fountain.

Bird baths related to their setting, and located where birds feel free to use them without fear, are not as frequently seen as one might suppose. Often it is the standardized pedestal bird bath one sees set in a circle of grass, with no redeeming beauty of its own and no attempt to relate this isolated feature to anything else in the setting. On page 283 is the plan for Waverly Oaks, with a bird bath well placed for the birds to use, near the berried shrubs they like for food, and well integrated in the design of the ramp which gives access to this section of the grounds. (See the discussion of it on page 284.)

A shallow portable basin with a rolled edge for birds to perch on is shown in the photograph on page 301, close to the figure of St. Francis, to which it is subordinated as part of the unit. This evergreen garden with a little central clearing is really a bird sanctuary. The encircling evergreen hedge of hemlock and pines affords protection, nesting places and seclusion for birds as they flutter from branch to branch before and after their bath, but the basin itself is out in the open so they can see no enemy is near when they use it. The figure of St. Francis never had a more lovely setting. For anyone who wants the maximum pleasure of a little garden retreat with a bit of water in it and the least maintenance, this picture should prove suggestive. The scale maintained between the wall of green and the diminutive strawberry plants, ferns and other woodland plants at the outer edge of the hemlocks is admirable.

A STONE RUNNEL AND A SIMPLE POOL. It is not perhaps generally known that birds, if given a choice between running water and still water to bathe



Copyrighted by All Hallows Guild.

210. Stone runnel and pool in the Bishop's garden at the Cathedral,
Washington, D. C.

in, prefer the moving stream so long as it is not a deep stream with a swift current that would sweep them along. In the Bishop's Garden at the cathedral in Washington, D. C., at the foot of an ivy-clad wall is a pool made of old stone from George Washington's quarry, the shape a variation of the Maltese cross. It is fed by water from a hidden pipe which runs down to the pool over worn stones taken from old Virginia homes where they served as rain drips. In such an arrangement as this, one has the pleasure of the course of running water and of seeing the birds that frequent it. The picture on page 303 shows the water emerging from between old box bushes to drip into the pool. Madonna lilies and a lilac are planted at the right.

THE NATURAL POOL. The hardest setting for most of us to originate is a simple, natural pool. It calls for an understanding of natural rock formations as well as the mechanics of construction, so that it will hold water, and the surroundings must be in accord. In my opinion, where a natural pool is an absurdity because of the sophisticated surroundings, a sunken garden, square or oblong or round, with rock plants in the retaining wall, and a geometric pool at the bottom, with a path between the wall and the pool, paved with flat stones, would satisfy the desire for water and stone and rock plants in a more fitting way. Trees, suitable shrubbery and a sitting area could be incorporated into the design where pertinent. On the other hand, when you *have* a suitable setting for a natural pool, it is one of the most delightful projects to undertake on your property.

LEAD AS A FOUNDATION FOR THE NATURAL POOL. A shallow basin for a small pool or runnel can be made in the ground and then be lined with lead, which makes a practical foundation for it. Sheets of this metal are laid in place, shaped to conform to the contours of the basin, and then soldered together. Rocks of varied sizes can be placed here and there around the edge and good soil for such ferns and plants as you wish to set out. The lead soon turns a dark color that is not objectionable seen under the water, and of course small stones or sand can be used as a partial covering over it. Repairs for such a lining are not expensive.

A POOL BUILT INTO ROCKS. The pool shown on page 316 from the Trumbull home in Spokane, Washington, is built into a rocky foundation provided by nature on this hillside. A great basalt rock looms up above the pool and smaller ones pried off other formations on the grounds have been added to the mass, allowing spaces for soil pockets for the many shrubs and plants gathered for this setting. Concrete has been used out of sight in the bottom. The grounds are piped with water for the purpose of sprinkling them in hot weather, so this pool is kept filled from a hose attached to a hydrant not far away. Basins such as this, with a rocky founda-

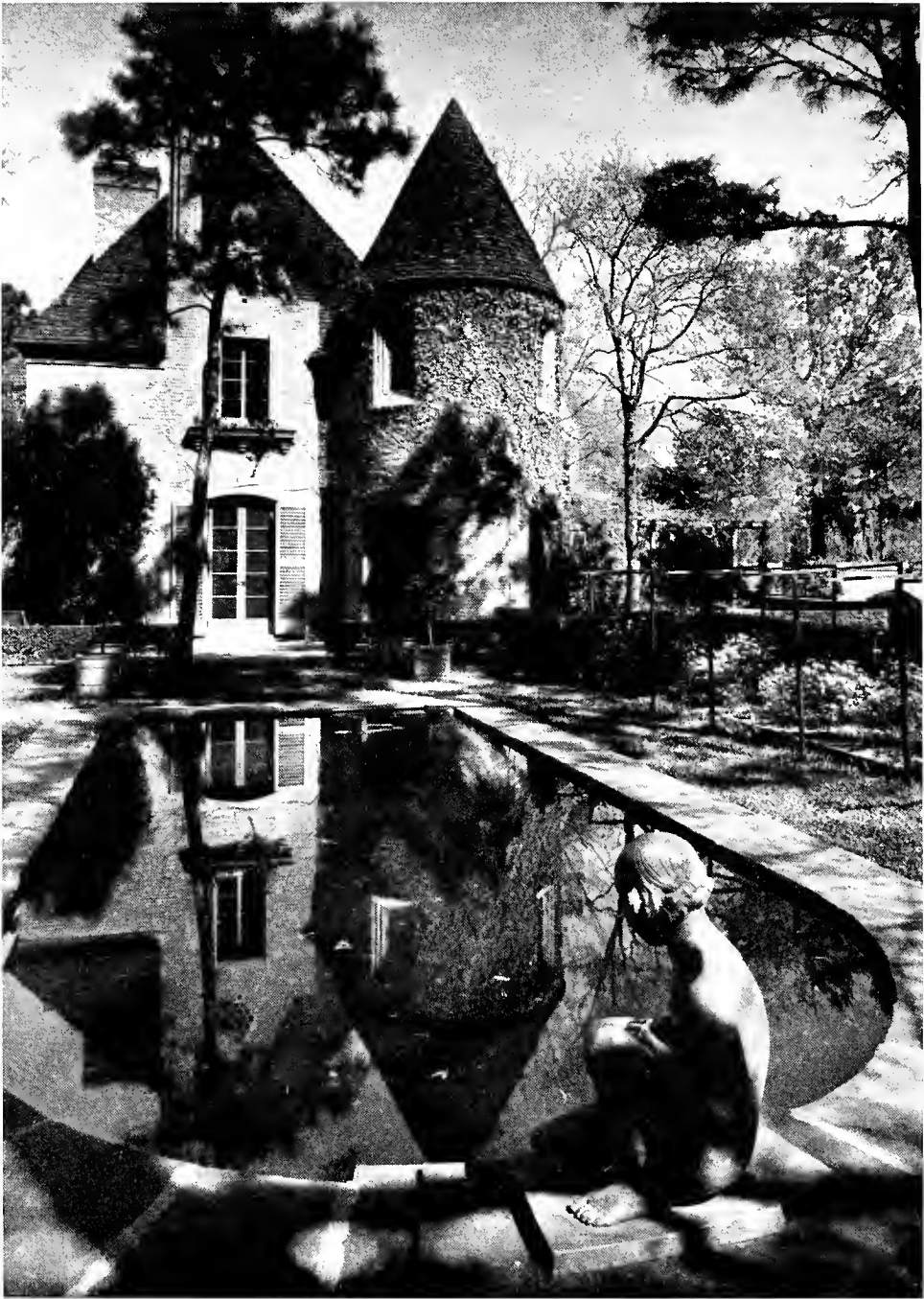


Photo by Silvia Saunders.

211. Reflecting pool for a Houston, Texas home, designed by the landscape architect, Ruth London. Architect, John F. Staub.

tion, do split somewhat as the rocks expand and contract. Water, if it can be kept from freezing solid, is a protection in winter. Consequently the pool is not drained in the fall but is covered with a few boards and straw or pine needles.

The planting is noteworthy. As the photograph indicates, iris—both the Siberian and *Pseudacorus*—are planted at the margin of the open side, with columbine, ferns and aubretias. From pockets in the rocks hang the many rock plants and shrubs, including *pentstemon sculeri*, a wild variety of a trailing habit, with lavender blue flowers in the spring. Pines and native mock orange grow out of fissures in the rocks and are reflected in the pool.



Photo by Samuel H. Gottscho.

212. Reflecting pool for a guest house at Mepkin Plantation in Moncks Corners, South Carolina, the home of Mr. and Mrs. Henry R. Luce. Architect, Edward D. Stone.

A REFLECTING POOL IN RELATION TO A HOUSE. A panel of still water does what turf and paving cannot do—it reflects the sky and whatever is near. Professional designers realize the aesthetic value of a house is redoubled by such a panel, if placed in relation to the building and designed for the location. It offers an opportunity for bringing the house and the grounds together as parts of a single organism.

The pool in the photograph on page 305, beautifully designed by the landscape architect, Ruth London, would give pleasure to children wading

or sailing their boats, but it has been situated so that the panel of water centers on the living room door and mirrors the house, thus achieving a permanent advantage in the landscape. It is oblong in shape, with one rounded end extending toward the pines and azaleas that give the effect of a woodland glade from the house. The sculptured figure of a child, by Ruth Yates, on the edge is located in just the right place to be reflected and enjoyed from any point. The coping of large flagstones is in pleasing contrast to the hand-made Holland bricks, the warm color of breaderust, of which the house is constructed.

Another interesting reflecting pool (see page 306) adds foreground distinction to the little raised courtyard around one side of a guest house designed by Edward D. Stone for Mr. and Mrs. Henry R. Luce's plantation home at Moncks Corners, South Carolina. The estate has been known for two centuries as Mepkin Plantation, but the house of the original owner, Henry Laurens, the Revolutionary patriot, was destroyed by fire some time after his death. The old bricks from it have been used in the modern guest houses and walls that bound and connect the various units, now erected to carry on in this magnificent riverside setting of live oaks and old shrubbery the traditions of Southern hospitality according to contemporary methods. See also page 327.

Here the placing and shape of the pool and the planting around it is an integral part of the whole design of house, shutters, horizontal flower box, and the large window which commands a view of the pool and trees beyond. If you consider the width of the upstairs window with its shutters, and then the increasing width between the two doors below, then the width of the pool and its plant borders in the terrace, and finally the great width of the space between the two pillars in the foreground terminating the perforated brick wall, you will see the composition is all planned on imaginary converging lines from front to back to give depth to the perspective. The broad easy steps are a final pleasing element in the balanced design which achieves both dignity and serenity through a harmony of horizontals.

A REFLECTING POOL IN AN INFORMAL GARDEN. Spacing is half the secret of landscaping. If you want a restful place in which to spend happy hours on your grounds, allow unbroken space in scale with the breadth of your vistas and the size of your main features. In Mrs. Meade Prince's garden in Westport, Connecticut (page 308), the oblong reflecting pool, with one end curved toward the figure of the dancing satyr, has more than its width in free space at the sides and straight end. At the end where the statue is placed so boldly and effectively, the planting comes closer but it does not cut off the vista behind the figure, seen from where the camera was set up.



Photo by Richard Averill Smith.

213. Reflecting pool in the Westport, Connecticut garden
of Mrs. Meade Prince.

The trees and shrubs are planted to suggest a boundary for the area with the pool as the feature, but they do not hem it in by a definite straight line. As a result, the garden seems to merge into the meadow beyond. The inter-spatial vistas we talked about earlier in Chapter IV are thus provided. Around the large tree a seat is built; and the casual planting in the vicinity is kept low to allow one these vistas, whether from the pool toward the meadow or from the tree toward the pool.

Such a pool requires the same care in construction as the swimming pools discussed in Chapter VIII. It cannot be left to amateur experimenting. Concrete is the usual material, reinforced where necessary and provided with expansion joints. The inlet pipes should be of galvanized wrought iron or brass, and there should be a control valve where it can be reached conveniently. The drain pipe may be of cast iron about three inches in diameter. It should have a control valve on it and should lead to a storm sewer or an adequate dry well. The water level is maintained by various methods, necessary for such contingencies as sudden rains. One method is to have a standpipe with the top covered with a screen located at the water level one desires to maintain, and connected with the drainage system at a point beyond the control valve.

BROOKS PREFERRED. Real estate people tell me that the first items the New Yorker asks for in seeking a country retreat are a brook and a view. When you read about the ancient art of gardening in China, you find that the Oriental two thousand years ago could not conceive of a garden-home without a lofty hill and a running stream. But a Chinese was willing to spend a lifetime creating hill and watercourse where none existed before, while the modern American wants his brook and view thrown in with the house.

Connecticut, as a matter of fact, abounds in saucy little streams. But often they have come to grief, and the remodeling of the terrain that may be necessary to reclaim a choked-up stream or a muddy pond is as much work as an artesian well or a brand-new brook or lake. One such stream along a country road near Bethel had become in the course of time a dumping ground, and some former owner had erected a stone wall through the middle of it. It offered a challenge that would daunt a Hercules. Nevertheless, with infinite patience, Mr. and Mrs. W. L. Marcy Pendleton cleared out the debris, demolished the wall, and left only one large boulder (seen in the photograph on page 310) at the base of an elm tree above the brook. Of the stones they made dams and paths along the curving edge of the brook, which dropped here and there a little at a time. They dug out basins for the series of pools, and threw silt up on the barren bank they intended to plant, where soil was almost non-existent.

Then came the problem of creating spillways so that the water would descend in a series of cascades, and vary its own sound enchantingly. It all looks so natural in the picture, you cannot imagine that the bottom of some of the pools is of cement, or that behind the rough stone at the front of each spillway is a little dam of cement and stone to hold against the force of the spring floods. Mrs. Pendleton found just mud and stones of no avail. She also found it impossible for a native workman to get her idea of a natural effect, and had practically to lay the stones herself to avoid having a straight line of cement and stones of uniform size.



Photo by Mattie E. Hewitt.

214. A reclaimed brook with cascades at the home of Mr. and Mrs. W. L. Marcy Pendleton in Bethel, Connecticut.

The photograph does not do justice to the planting up the banks to the right of the picture. It does, however, show the details of the native ferns unfolding their crooks, for all the world like question marks, and it shows the cowslips in the foreground, which stand being inundated in times of spring freshets, and it shows the tips of the native swamp buttercups rooted in the muddy bottom about to emerge with their lacy cut-work of leaves and glistening golden thimble heads of bloom, so different from the chalices of field buttercups.

Mrs. Pendleton has planted a weeping willow to supplement the spice bush and swamp maple on the road side of the brook, with flowering

dogwood and cedars up the bank to the right. Between the rocks near the brook she has put such wild flowers as trillium, cranesbill, jack-in-the-pulpit, false Solomon's seal, hepaticas and violets, and introduced on the ascent bleeding heart, Johnnie-jump-ups, Jacob's ladder, coral bells and *cerastium tomentosum*, with sedums and thymes near the top where the sun is more likely to dry out the crannies. Flat rocks, supported by stones, provide pleasant sitting places under the largest trees in this brookside garden.

NATURAL PLANTING AROUND BROOKS OR PONDS. Wherever a brook is introduced or recreated in the landscape, or a pond made by damming a little stream, the question of how to plant the edge or banks so your bit of water merges into the surroundings may call for a study of plant ecology—that is, plant groups as they occur in nature under certain conditions of sun and shade, kind of soil, and drainage in your locality. You will find, for instance, that the trees, shrubs, ferns and wild flowers along a brook in a given section will differ from the plant groups found along a lake or next a swamp in that same general section, and from the meadow or woodland groups in that locality.

When you become familiar with the related groups you will know that if you have a few swamp maples and alder in a section along a brook or swamp, you are likely to find also shad blow, both the black and red ash, shagbark hickory, hawthorn, elms, willows, arrowwood and ironwood, with such flowers as wood anemones, trout lilies, red trilliums, bloodroot on stony banks, meadow rue, turtlehead and cardinal flower. The study of plant ecology is a great help, because if you have even one or two of the members of a group existing you will understand what to add that will thrive with them and take on the natural character you are seeking to establish or maintain.

In other words, the natural treatment of any area does not depend on arranging the stones and the contours as they appear in nature and then gathering from hither and yon all kinds of native trees and plants. You will want to combine the ones that grow together. Where hardwood trees are growing along woodland streams, hard maples, white birch or hemlock, you can establish viburnums, pinxter azaleas, hepaticas, Indian pipes, showy orchis and Solomon's seal. Ferns of various kinds can be found in all the different groups. Books on wild flowers and native trees, as well as observation, will reveal fascinating plant groups to experiment with. It follows that you can apply the same method to naturalizing meadow, sea-shore, hilltop or wooded valley.

DEVELOPING AN OLD MILL POND. There is a valley not far from Newtown, Connecticut, where a former mill pond has been the chief outdoor interest

for a family over a period of fifteen years. To have had some expert come in and develop the whole place in one year would have deprived the owners, Mr. and Mrs. Rea Irvin, of half the fun of owning their country home. At first the pond could only be enjoyed near the house as a swimming pool, after being drained and cleared out down to hard pan. Then brush piles of half a century, with a covering of earth and debris, had to be removed and the swampy edge of the water filled in and a shore line established by a low retaining wall of flat stones, dragged in by the combined efforts of the household on a home-made stone boat.



Photo by Mattie E. Hewitt.

215. A millpond in Newtown, Connecticut, developed by the owners, Mr. and Mrs. Rea Irvin.

Nature provided large elms and maples at intervals along the pond, and in the shade of one of these groups, close to the edge, a rustic arbor was put up with a flooring of flat stones where chairs, durable enough to be left out all summer, are set for tea and breakfast gatherings, and for such times as there are special treats to watch. One such time is when the current wafts a little flotilla of white petals from the quince tree further upstream. Another is when the humming birds and orioles build their nests on branches that stretch out over the water. It is more important to have the place and the time to enjoy your waterside than to have the rarest horticultural specimens in your planting.

Mrs. Irvin has made the fringed gentian and cardinal flower grow from seed in open patches along the brook and produced new rhododendrons by layering old ones, and sought native shrubs to border the path that now winds up toward the woods. I chose as the spot to photograph the steps in front of the arbor (see the photograph on page 312) because on the May day I was there, the most beautiful feature was the reflection of the trees in the water, in that half-way stage when lines still predominate but every twig has its unfolding leaf. You feel the seclusion of this wooded valley and can glimpse the evergreens on the stretch below the waterfall, and a bit of the planting at the right in the foreground. The flowers are the dwarf *iris cristata* and *phlox subulata* growing between the rocks of the curbing.

UTILIZING NATURAL FEATURES

THE PERSON WHO can take an uninteresting plot of ground, with nothing but crab grass growing on it, and create a setting for outdoor living that is useful and beautiful, has talent. Many suburban and city lots present just this problem.

But suppose our property has the remnants of an old orchard and a tumbledown woodshed on it. Shall we cut down the old trees, tear down the woodshed and import some rocks so as to have a rock garden in that area, or shall we decide to orient our terrace to the orchard, supply a few new fruit trees, build a shelter where the woodshed stands, to take us out among the trees, and work out a planting scheme in the proximity of the shelter more suited to the terrain than a rock garden? Perhaps our land has a high ledge back from the road. Shall we explore the possibilities of locating our house where it will profit by the view, or close our minds to this because of the expense of a drive, build down by the highway, and in time spend more than the drive would cost to develop some interest there because the outlook is so dull?

Perhaps we have a plot on an inlet from the sea, with a low, boggy shoreline, the indentations of which are flooded by the tides so we can never use the water's edge. Shall we develop our garden away from the water or build a retaining wall, fill in a little terrace and place for a dock, and actually make use of this unique situation, giving up some feature that anyone can have anywhere in order to afford it?

Perhaps we see a tangle of underbrush we cannot identify, out beyond the vicinity of our intended tea terrace, and blithely select at a nursery a dozen assorted shrubs of the usual material we associate with a cultivated garden, to screen out our chaotic wilderness, never dreaming that the tangle we cut out or screen out contains fragrant clethra, pepperidge saplings that need only to be thinned out to show their singular beauty, and the highbush blueberry, from which we could create a setting in keeping with the natural character of our place.

Perhaps we live on the edge of a steep New England hillside of stones and sumacs and red cedars, and because we cannot develop this into the cultivated terraced gardens we read about, we clear it, grade it smoothly, sow lawn seed on it and plant a few pyramidal junipers or Japanese yews here and there on its shaven surface, to redeem the monotony. This is a mistake for two reasons. A steep slope or bank is the most difficult kind of terrain to run a lawn mower over. It is not convenient as a living area, nor

yet possible to walk on without laying steps. It would be much simpler if you started, as ground cover plantings, whatever grows in your locality—ferns, wild strawberries or wild violets, field daisies, sweet clover, the early hardy asters, Gill-run-over-the-ground, sorrel, if soil conditions are right—something interesting to free the owner from maintenance. Masses of honeysuckle and wild roses take care of many banks. *Potentilla fruticosa*, sheep laurel, chokeberries and the native spreading juniper are at home on many New England hillsides, and break up its flatness.



Photo by A. J. Lacey.

216. Rocks and pines below the house at the W. W. Trumbull home, Spokane, Washington.

When you solve the ground planting problem, you have the possibility of planning your paths according to the curves of the contours so they are easy and pleasant to follow. Some grading may be necessary to scoop out hollows that are not pronounced enough to give shadows and depth where you want it, or to build up a vantage point that is too restricted in size to be useful. By clearing out the underbrush and keeping or moving into important positions such tall shrubs as deserve notice—the beautiful witherod, witch hazel, spice bush, elderberry, wild plum and black alder, for instance—the character of the slope would be preserved. Red sumacs and cedars, separated so they develop their true shapes, can lend great beauty to the scene. The ability to bring some order out of nature's chaos and make it

available, requires as much imagination and skill as to start out with nothing and build up a landscape plan.

The chief deterrent to the solution of such problems is that we bring a preconceived idea of what we think we want to a place, and impose it without regard to the situation. We say, "Let's decide tonight where to put that rose garden we were talking about, or those shrubs we ordered from the spring sale," instead of saying, "Before we decide on a rose garden, or what shrubs we need, let's look the place over and see what can be done to bring out the possibilities of this or that area."

It is better not to start developing at all than to do it hastily, before we have got the message of how to work out our needs in terms of what the place has of its own to offer. In a treasure hunt, one picks up clues off the bushes as one goes along. Utilizing natural features is just as much of a lark, but one has to hunt for the clues first.



Photo by A. J. Lacey.

217. Pool with native planting at the W. W. Trumbull home, Spokane, Washington.

A HILLSIDE IN SPOKANE. Only great basalt rocks, native trees and shrubs, ferns and some wild flowers grew in a confused wilderness on the hillside between two avenues in Spokane, Washington, when Mr. and Mrs. W. W.

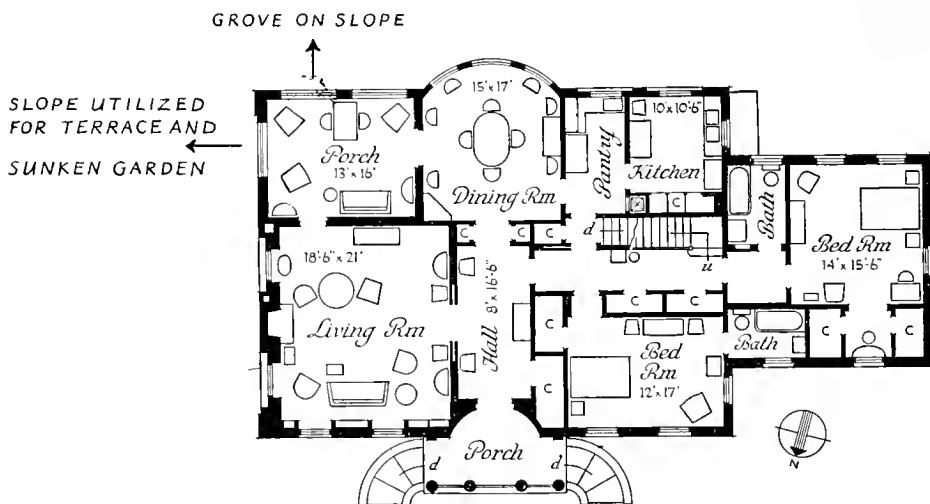
Trumbull purchased it. They built their home on the upper level near the street, and developed a series of natural plantings on different levels as you follow broad turf paths around the house and down to the lower boundary. The pictures on pages 233 and 315 show the tall *ponderosa* pines, the rock formations, the native *philadelphus Lewisii* and *philadelphus Gordonianus*, which grows wild, much as laurel does in New England, and had planted itself above the rocks before the lot was improved at all. Benches are conveniently placed for both the near views and for the distant outlook toward Mount Spokane, as seen from the pool. On hot, wearisome afternoons there are many cool, secluded sitting areas in which to take refuge.

The pool, introduced in an appropriate way, is described on page 304. The rock behind the pool appears at the top of the picture on page 232 above a steep slope of ground. From pockets in the rocks hang arabis, aubrietia, *campanula garganica*, *campanula muralis* and *campanula pusilla*. A *philadelphus* is in bloom at the top of the rock. Below are plantings of Mugho pine, *spirea Van Houtteii*, various iris, and columbine. See page 316.

This hillside was not developed all at once. Since the owners hit on the idea of making their hillside a natural planting, they have from time to time brought home wild flowers, young mountain ash, maples and rocks from their drives to install in place. The fireplace shown and described on pages 232 and 233 was just one project that took time, the pool another, after the ideas came for them in locations that had not been hastily developed for some irrelevant purpose. Unless one has the help of a professional, whose many years of seeing possibilities enable him to think out such results at once, the average person needs time to arrive at them, letting them evolve as his interest and understanding of the basic idea develops.

A HILLSIDE IN ATLANTA. So many people hesitate to buy property with a steep pitch to it. They are fearful of and unused to the possibilities involved. The seeming disadvantage of such a site has been utilized to remarkable advantage in the modern home of Mr. and Mrs. Hal F. Hentz, designed by the architectural firm of which Mr. Hentz is a member. The plan on page 318 shows how the floor at street level has been arranged as compactly as a modern apartment, for all the spacious living rooms, a porch and the owners' bedroom over the garage. The garage, laundry, boiler room and servants' quarters are on the level below the street, with windows toward the grove of trees in the ravine at the back. This natural grove, to which the owners have added native azaleas and rhododendrons, filters the light and relieves the glare of the sun in the porch and dining room overlooking its greenery. Vistas are not obscured, since the trees are of an open character. The shade is particularly welcome in this climate, which is subject to extreme heat in summer. At this season the porch takes the place of both

dining room and living room, because it is shady and airy and most comfortably furnished. It is designed like a room, with a high ceiling and beautifully proportioned openings like floor-length windows, in keeping with the Greek Revival traditions evident in the house, and also in keeping with our modern ideas of ventilation. The windows are screened, and have unusual ironwork guards at the bottom. Bird prints hang on the yellow painted brick walls. The view through the east window, seen on page 319, shows how the drop in grade at this side of the house has been adapted to the enjoyment of the owners. What you see is a circular sunken garden through trees.



218. Plan of the Atlanta, Georgia, home of Mr. and Mrs. Hal F. Hentz; architects, Hentz, Adler and Shutze.

The lower part of the exterior walls at the east side of the house are clothed in the verdure of magnolias espaliered against them. The characteristic trees of Atlanta gardens—the magnificent old pines, flowering dogwoods and cherry laurel—grow close to the house and have been utilized as shade trees for a circular terrace set part way down the slope, with periwinkle as a ground cover around it. The retaining wall is broken by a flight of steps leading down to the large sunken garden below, the site of an old dump. Both from the house and from the terrace one can look down on this garden and therefore appreciate its pattern. It illustrates what to do with a steep slope, by taking advantage of the beauty of existing trees and choosing the lowest level of the natural contours for the broadest expanse of flat area, here devoted to the sunken garden. This is less trouble to grade than where the ground slopes the most.



Photo by Ernest Graham.

219. Sunken garden, seen from the east side of the porch at the Hal F. Hentz home in Atlanta, Georgia.

The circular garden is out in the sunshine, but has the terrace trees in the foreground and at one side old hickory trees, one with an arrow carved on it by Indians long ago, pointing to a spring not far away.



Photo by Alfred A. Cohn.

220. Summer home of Mr. and Mrs. Englebert Roentgen, Woodstock, New York.

SUMMER HOME IN THE CATSKILLS. Landscaping a mountainside not far from the village of Woodstock, New York, has been a summer recreation for Mr. and Mrs. Engelbert Roentgen ever since they finished transforming the house itself from a rough lodge into a summer home, full of vibrant color reminiscent of Bavaria. They built out the porch, shaded by a continuance of the house roof, as shown in the photograph on this page. They leveled the immediate foreground for a simple garden and put in a retaining wall, thus creating a broad shelf for the house to rest on. The horizontal lines of roof and wall, and the stonework, all help keep the house low in accord with the broad sweeping lines of the natural contours.

From the porch (see page 321) the Roentgens have the kind of view of Slide Mountain most of us are lucky to see once in a lifetime. They cleared the path down from the house to the main road and put in the stone steps of native rock (one hundred and ten of them), and considered the view worth the climb up during the years they waited to build their motor road.

Their courage is an inspiration to those of us who hesitate to buy a house situated so far up from the highway!



Photo by Alfred A. Cohn.

221. View of Slide Mountain from the Roentgen porch,
Woodstock, New York.

The owners value too highly the natural growth of laurel to subordinate it to extraneous shrubbery. That is where they score in maintaining the natural character of the place. Clearing footpaths has been a major sport on their twelve acres. They have been laid out with objectives in view—perhaps a very old hemlock or an unusual tulip tree, or some great rock that was never seen because it was too difficult to reach through the uncleared land. Along the mountain stream above the house a walk has been made, with rustic bridges over the gullies, and a stone grill near the water. The owner's hobby is revealing vistas and building benches to overlook them.

With the help of a mason, an oblong swimming pool has been hewn out of a great sloping ledge of rock near the house, fed from the reservoir of spring water that comes down the mountain by gravity flow. Near it are rock plants, and a music center where players can sit in a semi-circle, with the listeners' benches above them and the forest as a sounding board behind. The highest mountains in the Catskills provide the distant view.

FEATURING TREES IN THE OUTDOOR AREAS. One way to make the existing trees on your place work for your enjoyment is to develop sitting areas under them. Then they mean much more than a form to look at through the windows or from a distance. Their branches overhead become roofs, and their shade is refreshing as you spend time lunching or chatting beneath them.



Photo by Mattie E. Hewitt.

222. Old hemlocks and bench at Deepwood, North Stamford, Connecticut. Landscape architect, Stanley Underhill.

The photograph above shows the way two ancient hemlocks on a woodland homesite near North Stamford, Connecticut, have been featured as a center for sociability, by the simple means of building the bench, with the back shaped like a peacock's tail, out between them. Other deck chairs can be brought down to supplement it on sultry afternoons. The house is on a knoll, oriented to look down into the shade of these two monarchs. Stones were taken out of the ground where the bench is located and rolled to the side for possible use when the time comes for an outdoor grill here.

The California guest house shown on page 323 has a good porch for outdoor entertaining; but the landscape architect, Thomas Church, realized the possibilities of that expanse of ground under the spread of the ancient live oak near the house and built out the extensive brick-paved terrace here, so that the house seems to overflow into the outdoor area for which this tree

is the natural canopy. Left as a lawn, the same space would never be as livable or hospitable in appearance and would be difficult to maintain.



223. Terrace under the live oak tree at Pasatiempo Guest House, Pasatiempo, California. Architect, Clarence Tantau; landscape architect, Thomas D. Church.

The associations that most people have with apple trees are something to utilize by featuring them in our landscape plan if the trees are already on the place. That is what Mr. and Mrs. Edward S. Hewitt did when they began to reorganize the grounds of the farm they purchased on Long Island. They intended to move the farmhouse and they located it with the orchard as the outlook from the courtyard (see the plan page 152) and from the windows. The vistas from the doors at each end of the main hall and from the rose garden shown on page 155 are planned to face toward apple trees, with benches invitingly placed in their shade.

Explore your opportunities if you want to make full use of your trees, and visualize what you can do. In a Greenwich, Connecticut, home there is an old hornbeam tree which is made the feature of a dining terrace. A horse-shoe-shaped table is placed partly around it.

A TREE AND A POND. A picturesque swamp cypress and a farm pond afforded the landscape architect, Christopher Tunnard, the opportunity to develop the pool shown on page 324 on the site of the pond, which had a marshy edge and was overgrown with sedges that left very little clear water

to reflect the sky. The old pond was dredged, the edges filled in and planted to grass, so that visitors can walk all around it to inspect the water lilies growing in it now. Daffodils have been planted on the banks. The hedge seen in the distance, as well as the nature of the English countryside here, helps to shelter the surface of the water from winds which would keep it in motion. Indoors, we place mirrors where they will reflect our choicest objects and redouble the beauty of our best views; outdoors, water is just as indispensable.



224. Pond on the site of an English farm.
Landscape architect, Christopher Tunnard.

FROM SWAMP TO DUCKPOND. The outlook to the south was anything but promising when the owners of the home shown on pages 70 and 325 bought the property. It was a swamp, harboring mosquitoes, and just a spongy mass of reeds and rushes impossible to walk over. The usual procedure would have been to screen in a porch for protection, and plant willows to shut out the view. Instead, the architect-owner decided to dredge it out and drain the surrounding flat area into a rectangular basin for a pond, which was located in line with an open terrace, seen on the rise of ground where the house is situated.

The structure embodies in its design French Provincial influence. The locality where such houses are to be seen in France is often low-lying country, interlaced with drainage canals and lined with Lombardy poplars, the roots of which help hold the soil of the banks in place. The situation

here had many of the same characteristics and problems. The project seemed worth undertaking, both from the standpoint of need and of tradition, and the results have justified the labor involved. Now, with the pond reflecting the sky to create interest, with water lilies growing in it and ducks swimming and feeding on it, the change in the outlook from the house is utterly astonishing. The poplars planted along the side are bound to make rapid growth, since the soil is right for them, and they will lift their pole-like forms high, adding to the beauty of the reflections and creating verticals in a scene that is mostly in horizontal lines. A stone retaining wall bounds the pond at the end near the house. The fill from the dredging makes a solid path around the basin, and since the swamp was drained, the mosquitoes do not breed in large numbers.



Photo by Mattie E. Hewitt.

225. Duck pond at the North Stamford, Connecticut home of the architect, Coleman Moser.

A LAKESIDE HOME IN OREGON. Full use has been made of the irregular levels and lake views of the year-round home of Mr. and Mrs. A. G. Sieberts on Lake Oswego, near Portland, Oregon. The architect, Richard Sundleaf, has designed the house so that the entrance and the garage are on the upper level toward the street. You go down a few steps to the level of the kitchen, dining room, laundry and living room wing. The large living room

is two stories high, and has a fixed window from the floor to the ceiling thirteen feet long, overlooking the terrace and the lake. In fact, every room in the house has a lake view. There is a dressing room and shower on the main floor for the use of bathers in the lake, and a heater room in the basement. Two bedrooms and a bath are above the kitchen wing.

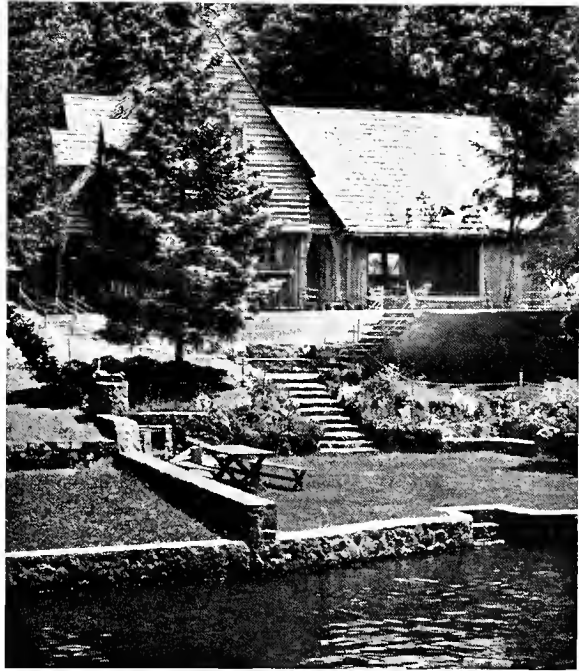


Photo by Columbia Commercial Studio.

226. Lakeside home of Mr. and Mrs. A. G. Sieberts near Portland, Oregon; designed by the architect, Richard Sundleaf.

Native materials have been used inside and outside the house. As the photograph on this page shows, the walls are of hand-split cedar siding, with some use of native stones with wide mortar joints in the lower story. The shingles are of hand-split cedar shakes. Inside, red lava rock from across the Columbia River gives an unusual character to the fireplace, while exposed fir beams in the ceiling, red cedar boarding for the walls and hemlock flooring all attest to the availability of wood in this timberland setting. The stairs are of solid wood blocks. All has an air of permanence, sound, honest construction and the greatest efficiency consistent with generously spaced rooms.

The lake side of the house shows the wooded hillside above and beyond the house, and the two trees left to frame the views of the water. The paths from the service entrance and the living room join at the steps which lead

down toward the lake. As bathing is the great recreational sport in this location, additional steps lead down into the water.

The wall at the waterfront was necessary to prevent constant shelving in the bank. On the level space, arrangements for outdoor meals have been made, with a fireplace in the retaining wall at one side of the steps and a stone seat at the other. Simplicity is the keynote with every possible use of the situation on the lake.



Photo by Samuel H. Gottscho.

227. Corner windows in a guest house at Mepkin Plantation, Moncks Corners, South Carolina, the winter home of Mr. and Mrs. Henry R. Luce.
Architect, Edward D. Stone.

CORNER WINDOWS TOWARD A RIVER VIEW. The architect for the guest houses at Mepkin Plantation, discussed on page 307, has planned a fixed corner window with a pair of casement windows set into a metal frame that can be opened for ventilation in the living room shown above, thus affording the long view of the river and the moss-hung oaks along its banks. If you have broad views to consider in locating and building your home, you will want to look into the possibilities of a contemporary house which is more flexible in the matter of fenestration than the strictly traditional house with balanced windows. Note the Venetian blinds and the draw curtains which can shut out daytime glare or give privacy at night to such glass walls.



Photo by Roger Sturtevant.

228. Beach house at Aptos, California, designed by the architect, William Wilson Wurster, for Mr. and Mrs. Dearborn Clark.

UNIQUE PORCHES SOLVE AN OCEAN-FRONT PROBLEM. A fifty-foot lot beside the sea does not offer much in the way of privacy, shade or shelter from breezes, when the usual beach house is built with just an open porch as the only alternative to full exposure to the sun and wind on the sands. The beach cottage designed by William Wilson Wurster at Aptos, California, solves the problem in a different way. The house, between a high bluff and the waterfront, is oriented directly toward the Bay of Monterey. (See page 50.) It is constructed economically of redwood, with studs in the lower story and narrow tongue-and-grooved boards on the upper story, and is oiled to prevent glare. The straight lines and flat roof carry out the plan in the most direct and modern way. Across the entire front, a porch is designed wider than the house. The central section is open to the sky. The two ends have high ceilings, a flat roof and large-scale glass sashes as enclosures, except for the opening toward the area between. (See the other photograph on page 50.)

As a result, the owners are screened from wind but not from the ocean views or the sunshine. They can dine or lounge inside the glassed-in sections under the shade of the roof, or out in the open deck between. A

wooden ramp, continuing the wooden flooring of the porch, leads down to the beach so that sand is not continually tracked into the house. The living room has sliding glass doors across the wide opening onto the porch. Even if the adjoining lots are built upon, the owners of this cottage will still have the maximum privacy for their outdoor activities because of this unusual living porch.

A SHELTER AT MANCHESTER-BY-THE-SEA. In the seaside garden of Mrs. John R. McGinley, an outstanding feature is the shelter (see page 330) situated on a point on the rocks at the end of a walk along the picturesque shore, with a retaining wall of native stone at one side and the garden at the right. It suggests the old English "Thunder-house," built in an exposed situation from which to watch the thrilling spectacle of thunderstorms, completely protected from the wind and rain but with floor-length windows from which to view it in all directions. The closed side for a fireplace is desirable so that in storms or fog or chilly weather it provides a warm, dry place to enjoy when the family get restless from being confined to the house. The flat closed side is against prevailing winds, but the structure has five other sides toward sea and land views. Thus there is no lack of outlook.

The terrace carries all around the shelter. The shape of the roof is unusual, but grew out of the plan. The roof slopes down and flares out from the chimney, with the weathervane on top of it. With many doors for ventilation one can have as much or as little breeze inside as one finds agreeable, and yet be close at all times to the pounding waves, the rocks, and the broad expanse of the sea.

The relation of the planting to the shelter is particularly fortunate. To interpret Nature and yet keep her within bounds for human needs requires great insight. The combination here of rock plants and garden plants with native trees, vines and shrubs has been made without losing the feeling of natural growth and natural layout. Mats of bloom cover the ledge next the retreat and partly carpet the terrace around it. Climbing roses festoon the roof, and vines grace the sea wall. Resinous pines, masses of bayberry, shrub roses, dwarf huckleberry bushes, cotoneasters and prostrate junipers contrast with iris, harebells and *gypsophila repens*. At one point in the wall, an iron grill has been set in to give unobstructed views out to sea from chairs inside the shelter.

OASIS IN THE DESERT. The problem of existing in comfort while taking advantage of a primitive setting could not be more difficult than in the desert at Palm Springs, California, where Nature interposes against the tide of civilization those dramatic and barren mountains of rose and mauve igneous rock, those burning sands, the exotic and thorny verdure, drought, sand storms, possible earthquakes, intense heat and bitter evening

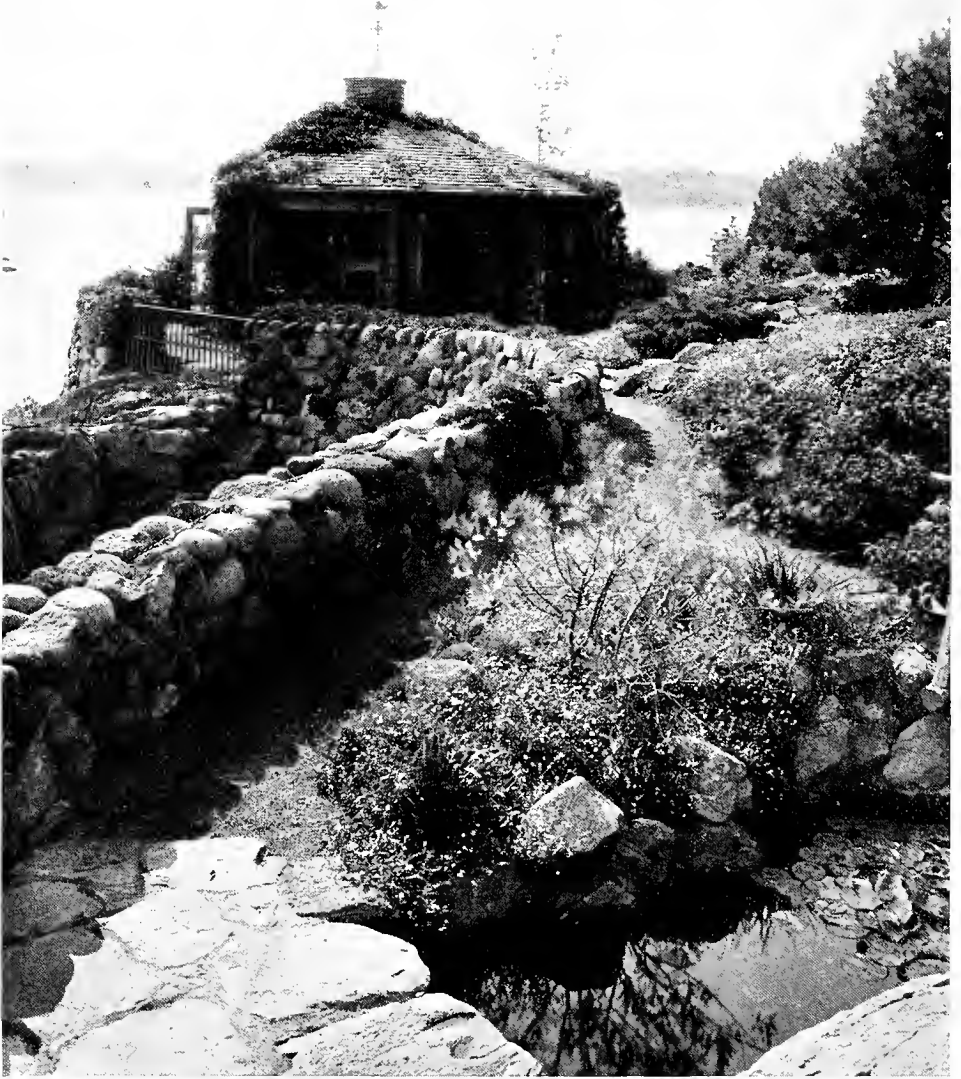


Photo by Mattie E. Hewitt.

229. Shelter and garden at Mrs. John R. McGinley's residence at Manchester-by-the-Sea, Massachusetts.

chill. The plan and pictures on pages 56, 333 and this page give a hint as to how the architect, Richard J. Neutra, has designed a modern house there at a cost under ten thousand dollars, to satisfy the owner's requirements and the climatic conditions, and how the landscaping helps it merge into the surroundings. The owner, Grace Lewis Miller, wrote a letter to Mr. Neutra after the house was built, from which I quote.



Photo by Shulman.

230. Corner of the house and pool at Palm Springs, California,
designed by the architect, Richard J. Neutra,
for Grace Lewis Miller.

"In general I had in mind that my house should above all make use of this remarkable Palm Springs setting. There are canyons and snow-covered mountains immediately to the west and the wide desert to the south and east. I wanted the house to be *part* of this setting, as well as restful and as much of a surprise as Palm Springs itself is. . . . I required that all entrances and all living should take place at the same level as the desert floor outside, no steps up anywhere. This has to my mind proved to be a very fortunate requirement, although nobody ever stops to think that this may be one reason why in this house we feel so much a part of the beautiful outdoors. . . .

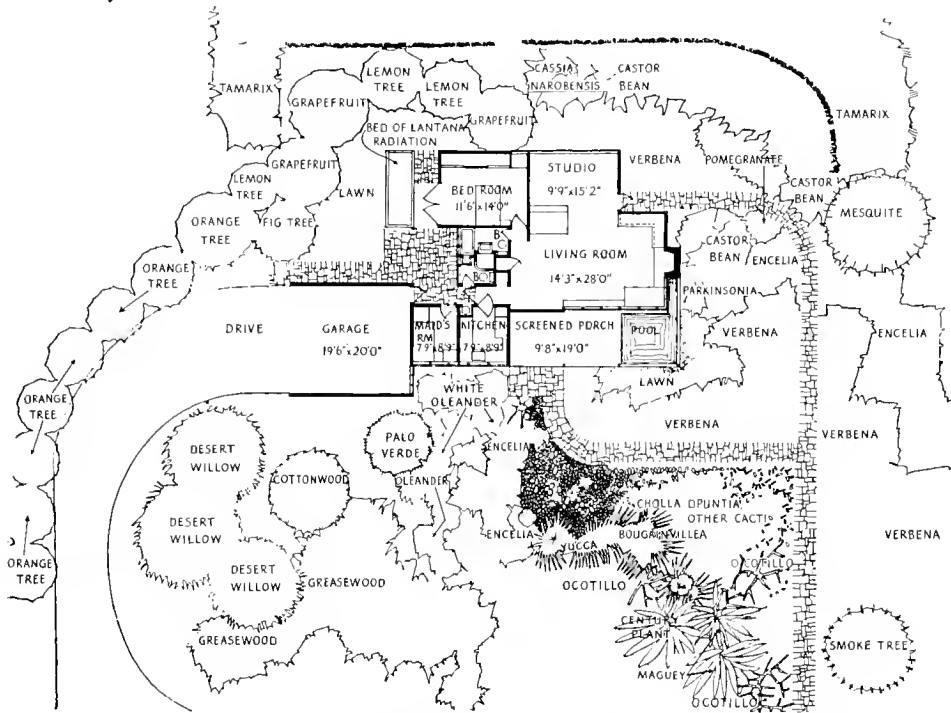
"It is apparent that Mr. Neutra had no difficulty in catching the spirit of the place. All of his particular constructions, as the sliding steel door, the slim steel sash, and full use of window openings, all vents open to ceiling, provide for...ventilation, wide visions and wonderful flexibility in the house. You are never crowded, neither do you ever feel all alone. As I remain here through May when the temperature rises above one hundred degrees, I see how very well the wide roof overhangs with screen wire set underneath the roof, as well as other provisions for heat insulation serve to temper the heat. If you have to stay indoors, this house is as much fun on a bad day as on a good day. You can watch the colors changing on the mountains or sit inside and watch a storm brewing or be right in the midst of a desert sandstorm and feel you are having a good time....

"Mr. Neutra was given a clear idea of my preference for taking meals outdoors.... He understood also that I enjoy making constant use of open fireplaces for heating my living quarters...supplemented by...electric heaters."

I was especially impressed by Mrs. Miller's insistence on retaining the old traditional method of heating her living quarters by a fireplace. It is being used for supplementary heat in even the most extreme examples of scientifically functional houses, since it seems to satisfy something deeper than logic in the human spirit. The points of general interest which adapt the house to the climate and the situation are numerous. The need for speedy erection and stiffness under lateral shocks both from possible earthquakes and desert winds, prompted the use of a steel and timber composite chassis. Great changes of temperature and moisture content were the reasons for introducing steel sash and doors. Wind attacks from the north in winter and ample radiation from the south in fall and spring were considered in planning a rather closed northerly elevation and the broad roof overhangs on the southerly one. The continuous screened openings on the underside of these overhangs permit unusual air changes in the super-ceiling space, while the ceiling itself is insulated against extremes in temperature by celotex. The house is built on one continuous earthquake-proof slab of concrete, dark gray in color, with no design in it, waxed like polished marble—delightfully cooling for the desert climate. The sliding doors of the living room open onto the screened porch, with the result that direct sunshine is kept out of the living room on this southern exposure, an advantage in hot weather. But when desirable, the whole indoor and outdoor area can be opened up as one large room. The windows in the studio adjoining the living room are of translucent glass, reducing glare but primarily intended for insuring privacy in the studio. (See the plan on page 333.)

The pool under the overhang of the roof is really a part of the house, and one of its most attractive features. It has a cooling effect, since it is shaded,

and refreshes anyone sitting within view of it on the porch or inside. The ceiling of the porch has channels for lights behind frosted glass. At night this simple means of lighting the exterior, including the pool, serves also as a subdued light for the living room for times when bright lights are not necessary.



231. Plan of Grace Lewis Miller's home at Palm Springs, California.
Architect, Richard J. Neutra

There is a bed of *lantana radiation* just beyond the wide overhang of the roof outside the master bedroom. At the side of this flower bed nearest the house (see the plan) a screening from the overhanging roof to the terrace flooring becomes the west wall of the bedroom whenever the two glass doors of the bedroom are opened to ninety degrees and fastened to the steel uprights of the screening frame. Thus when desirable the bedroom can be extended into an airy screened sleeping porch toward the west, with its mountain view.

PLAYING UP THE SETTING. The straight lines of the house and the flat roof make a distinct contrast in form to the jagged, angular rocks of the mountains and the long curving lines of the dunes. The level roof accords with the desert floor. Mr. Neutra has so interpreted Nature here that we are not conscious of what was there before or of what has been added, or of where

the desert ends and his plan begins. There is no obvious line of separation; the planting comes forward in some places and recedes in others, as the plan on page 333 shows, and yet the paths have been considered and the places where oleanders near the pool, or castor beans outside the garage wall, would merge the house into the setting.

The planting plan Mr. Neutra worked out is based on a study of native material. To anyone unacquainted with the bloom of the desert, the coloring is incredible. There are the gray-greens of the many kinds of greasewood, with crimson, purple or white blossoms, the blue flowers of the smoke tree, the golden blossoms of the incense bush and the great delicacy of the Palo Verde trees with their pale yellow blossoms, to mention only a few. These Mr. Neutra has incorporated into the plan with native yuccas, the century plant, desert willow, and the many exotic forms of cacti, from the barrel form to the slender Ocotillo with its thorny wands coming up from the central root. He has used as a ground cover a variety of verbena that makes a pink carpet next the paths and below the shrubbery.

There is no reason why modern houses cannot be built into open country anywhere, in such a way as to play up the character of the place, whether it is a New England hillside, a river bank in Virginia, or a woodland clearing in Oregon. The setting, where of unusual beauty, deserves to be played up. There is nothing in the design of modern houses which should limit them to locations on small lots in populated communities, or to an architectural style of landscaping. The whole idea of designing a modern house with the grounds as a unit is to make it function for human needs in a particular setting. The house we have been discussing is eloquent of what can be done to feature the surroundings, when that will accomplish something of value to the owners. The purpose is everything.

FROM AN ARTIFICIAL TO A NATURAL BROOK. When the present owner of the early nineteenth-century house shown on pages 88 and 89 purchased the property, the brook had a steep and artificially sloping bank down to it from the drive, and an equally steep embankment across the stream. That drive has been taken up and a new drive built in from the road to the service side of the house, so as to keep the area toward the brook for outdoor living. (See page 335.) One of the many improvements made by the landscape architect was to raise the ground level of the former driveway, making it nearer the level of the house, incorporate it into the surrounding lawn and then to roll the whole gently down to the brook, varying the slope in some places so it is steeper. This same treatment was followed on the opposite side of the stream, with the result that its curving course now proceeds along the natural banks it probably had originally, before former owners imposed the artificial grading on them. The next improvement was



Photo by George H. Davis Studio.

232. Library wing of the Richard S. Humphrey home at Brookline, Massachusetts, as seen from the brook. Landscape architect, Bradford Williams.

to get rid of the old dams of cut stone granite and the smooth curbings that lined the pool, replacing or concealing them by large natural stones.

A glance at the plot plan on this side of the house (see page 89) will show that the brook appears from under a driveway, which is screened from the lawn view by weeping forsythias. It comes close to the new garage before running over a dam that now looks like a natural flat ledge, with an eighteen-inch drop, then widens into a little pool and curves around it to flow over another dam, this time dropping five feet between great rock shoulders to a mass of tumbled boulders in the stream bed below.



Photo by George H. Davis Studio.

233. Brook and slope from the garage terrace at the Richard S. Humphrey house in Brookline, Massachusetts.

There are two six-inch pipes running through the lower dam at the level of the pool bottom, with large tapered wooden plugs as stoppers when the pool is full. But when spring thaws send so great a flood of water that the spillway cannot carry it, the plugs are driven into the pool and the pipes then release a part of the extra water and prevent it from rising high enough to wash out the banks either side of the lower dam. The photograph above shows the second waterfall, the daffodils and, close to the garage, the blossoming trees.

The old elms, hornbeams and maple have not been disturbed. A wistaria

has grown up over a rustic seat and into a large American elm at one point. In the shade of the maple a few rhododendrons have been set in. Many recently planted daffodils race down the banks to the brook in April, with English daisies springing up after the daffodils go. Wild flowers and the native azaleas have been added sparingly at the lower end of the stream. Restraint is a word we hardly know how to apply when we seek to interpret prodigal Nature, and yet it is the key to success in a little stretch of brook like this, where one tree and a few shrubs at a time stand out and can be appreciated, but where a mass would crowd the scene and confuse the onlooker.

The architectural changes which have been made in order to utilize the brook for its full value are extensive. (See page 86.) The kitchen and pantries that used to face the stream have been relocated in an addition built on the opposite side of the house, where the drive, the main entrance and main stairs are now located. This frees the brook side of the house for the living room, dining room and library. The old porch remains as it was. The original brick-paved terrace outside the former kitchen, now the library, is shaded by an old crab-apple tree, as seen in the photograph on page 335, and is a favorite outdoor room from which to enjoy the setting. The new terrace back of the garage, described and shown on page 282, is of blue stone paving on a lower level to bring this area closer to the brook, the waterfall and the pool. A hedge of box borders it.

There is nothing just like this home anywhere, but if the present owner had not gone to the trouble to change the drive and main entrance and adapt the house plan to take advantage of the brook, and followed this by reclaiming the natural character of the grounds and stream, the place would be a quaint relic of the past, with no more to attract a present-day homeowner than the singular beauty of its architecture and its setting of old trees. Now it stands as a unique re-creation, in which the enduring beauty and traditions of 1827 are infused with the expanding spirit of today.

NATURAL PLANTING IN A FLORIDA PATIO. It is curious how in certain sections of the country, at certain times, the wave of enthusiasm for some one vine or shrub becomes an obsession and everyone thinks he or she must have that imported novelty, until it becomes so banal that its unusual quality is soon diminished. It is repeated without any real understanding of how it can occasionally be used with telling effect.

My impression, which may be unjustified, is that the average Northerner who goes to southern Florida and builds a winter home, has not begun to tap the resources of varied and beautiful native, semi-tropical material that grows in undeveloped areas there, and nowhere else in this country. He is so enraptured with the ubiquitous bougainvillea, bignonia, crotons, palms

and hibiscus from the tropics—exotic, colorful and of course different from northern landscape material—that he does not even slow down as he takes that fascinating drive over the new causeway to Key West to glimpse the gorgeous French mulberries (*callicarpa americana*) on Key Largo, the bay cedars, wax myrtles and sapodilla trees with shining leaves, along the road; the sea gentians, the exquisitely scented borrichia or sea oxeye with yellow blossoms, the dainty wild poinsettias, the false indigo, the *eryngium aromaticum* or button snakeroot, the coast morning-glory, next the water; the soapberry tree with handsome winged leaves, the wild herbs—sage, fennel and savory—all of which withstand the salt air and burning sun, and could be built into superb effects around winter homes, if rightly used.

As an example you will find on page 9 the picture of a Palm Beach patio which makes use of native material with some tropical additions, allowed to grow in natural shapes, arranged in small groups so you can distinguish the forms, and set into a formal design. The square patio has house walls on two sides, a shady loggia at a third side and an arched opening overgrown with jasmine between trees on the fourth side into the area devoted to the swimming pool, enclosed by more native planting.

Secluded as patios in traditional style should be, symmetric in plan, it is at the same time so dominated by the varied native trees of picturesque shapes that one relaxes in their shade, untroubled by any fixity of design. The patio is about fifty feet square and is paved in native stone quarried off the Keys. The octagonal central pool has an octagonal base of flower beds given to maidenhair ferns, browellia, yellow calla lilies and marigolds. The tree at the left of it is a huge seagrape, a native tree which has begun to be recognized as of surpassing beauty in structural growth. It was here when the house and patio were laid out, and breaks up the exactness of the other planting in square beds in the four corners. (See the other seagrape tree in the luncheon terrace on page 237.)

The trees in these four corner beds are all different. One bed has a gumbo limbo tree as its chief planting. The gumbo limbo, with its bark gleaming like bronze in the sun, and its evergreen leaves, is another treasure from the tropical south end of Florida, too seldom used. Another tree group consists of a pigeon plum and rubber tree. The other trees are date palms and tropical almonds, with an underplanting of ferns of many kinds, from miniature forms to tree ferns. The most graceful of palms, the fishtail, growing in pottery containers, are set around the loggia.

It has been the purpose in this outdoor room, and in the paths that lead around the grounds, to bring together the characteristic jungle-like growth of native plant material to be seen in the hammocks and everglades of southern Florida. To do so and keep people in the patio from being dwarfed and confused by the lush growth, is an accomplishment which owes its



Photo by Harold H. Costain.

234. Terrace and Blue Ridge Mountains at the Tryon, North Carolina
home of Mr. and Mrs. Walter C. Hill.

success in large part to the use of broad open paved areas and a definite geometric design to hold the wild material into an ordered pattern.

A VACATION HOME IN THE BLUE RIDGE COUNTRY. The view is the main natural feature that prompted Mr. and Mrs. Walter C. Hill to choose their extensive acreage on a ridge in Tryon, North Carolina, and to locate their lodge to take advantage of the view inside and out when they started the development of this vacation home. Here they find scope for hunting, shooting, farming and gardening. The place is called "Many Levels," which suggests at once the fact that the house follows the grade of the land on the site. The ground has not been made to conform to the house. The Hills wanted a rambling structure they could add to, not a balanced formal house. They found that the ranch house in general expressed both in its flexible plan around an open terrace and in its rooflines and rugged character the kind of home suggested to them by the vast areas of the Blue Ridge country spread out before them. (See the photograph on page 339.) It is not a copy of anything seen in the West, although this type originated there.



Photo by Harold H. Costain.

235. Outdoor fireplace and porch at Many Levels, Tryon, North Carolina.



Photo by Harold H. Costain.

236. View of cactus window garden and terrace at the Walter C. Hill home in Tryon, North Carolina.

The owners designed it with the idea that it should be built by native labor, of native materials, and by the methods with which these workmen are familiar. The lumber for it was cut on the place and seasoned before building operations started. The men set up a circular saw and motor-driven plane, and made everything except the screens and window sash on the grounds as they went along. Skilled artisans among them split the shingles for the roof from huge oak chunks. Electricity, modern plumbing and heating arrangements and an air-conditioning system were installed and outside walls and ceilings were insulated but otherwise the house represents the traditional building methods and craftsmanship that continue to this day in that locality. The terrace extends the hospitable facilities of the porch out into the area enclosed by the L of the two wings. (See page 340.) It has the grand panorama for a backdrop and the chummy fireplace and house walls for shelter when used in the evening. The view through the living room window, seen on page 341, shows the thickness of the masonry wall on the chimney end of this wing. The recess has been ingeniously utilized as a place for a cactus garden planted in sand in a metal trough. The outside glass is fixed. The inner glass is open at the top so the plants can receive air and occasional water.

It has been said that the lasting works of art, whether buildings, paintings, sculpture, gardens or literature, have been distinctly local in character. The masters created out of what was familiar and to their own liking. The owners of this unpretentious lodge have made the Blue Ridge country theirs by adoption, and find it answers their needs as a center for their kind of outdoor life. They have wanted to build the character of this place into every nook and cranny of their house. They have made it one with the sloping site, one with the broad plateau that anchors it, one with the stones that form its ledges, the very trees that grow on the mountains and the culture of the people they live among.

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM LIGHT TO DARK.*

COLUMNAR (ratio approximately 8:1 except where otherwise noted)

HEIGHT	LIGHT	MEDIUM	DARK
50' plus	Populus simoni fastigiata (Simon Poplar)	Acer Saccharum monumentale	Abies fraseri (Fraser's Fir)
	Populus nigra italica (Lombardy Poplar)		Cryptomeria japonica lobbi
	Quercus robur fastigiata (English Oak)		
40-50'	Betula pendula fastigiata (Pyramidal Birch)		Fagus sylvatica fastigiata (Columnar Beech)
			Juniperus virginiana can- narri (Cannart Red Cedar)
20-40'		Thuja occidentalis (American Arborvitae)	Thuja occidentalis douglasi pyramidalis (Douglas Arborvitae) Sciadopitys verticillata (Umbrella Pine) 6:1
12-20'	Juniperus communis suesica (Swedish Juniper)	Crataegus oxycantha splendens (Paul's Scarlet Haw- thorn) 6:1	Juniperus virginiana schottii
	Thuja occidentalis pyramidalis (Pyramidal Arborvitae)	Ligustrum vulgare pyramidal (Upright Privet)	Chamaecyparis lawson- iana (Lawson's Cypress)
6-12'			Taxus media (columnar form) (Hybrid Yew)
3-6'	Juniperus communis hibernica nana (Irish Yew)		Taxus cuspidata nana (Dwarf Japanese Yew) (upright form trimmed)
	Ligustrum ibolium (Ibolium Privet)		
	Berberis thunbergi erecta (Truehedge Column- berry)		

* Supplied by the courtesy of James C. Rose, Landscape Architect.

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM
LIGHT TO DARK (*Continued*)

HORIZONTAL (effect of right angle opposition to vertical form)

HEIGHT	LIGHT	MEDIUM	DARK
50' plus		Quercus palustris (Pin Oak)	Pinus strobus (White Pine)
40-50'	Nyssa sylvatica (Tupelo) Pseudolarix kaempferi	Quercus palustris	Pinus strobus
20-40'	Crataegus mollis (Downy Hawthorn)		
12-20'	Styrax japonica (Japanese Snowball) Viburnum prunifolium (Blackhaw)	Crataegus crusgalli (Cockspur Hawthorn) Cornus florida and alternifolia (Dogwoods) Malus coronaria (Wild Sweet Crab)	
6-12'	Euonymus alatus (Winged Euonymus)	Ligustrum ibota regalianum (Regal's Privet) Viburnum tomentosum (Doublefile Viburnum)	
3-6'	Juniperus chinensis pfitzeriana (Pfitzer's Juniper) Lonicera morrowi prostrata (Morrow's Honeysuckle)	Diervilla trifida (Dwarf Bush Honey- suckle)	Taxus cuspidata nana (Dwarf Japanese Yew) Juniperus sabina tamariscifolia (Savin Juniper)
1-3'	Juniperus chinensis sargentii (Sargent's Juniper)	Cydonia japonica pinnata (Dwarf Flowering Quince) Juniperus horizontalis (Creeping Juniper)	Cornus horizontalis Taxus canadensis (Canada Yew) Pachistima canbyi

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM
LIGHT TO DARK (*Continued*)

PENDULOUS (as opposed to vertical and contrasted with horizontal)

HEIGHT	LIGHT	MEDIUM	DARK
50' plus	Acer Acer sacharinum wieri (Wier's Silver Maple) Salix elegantissima (Thurlow Weeping Willow)		
40-50'	Betula pendula dalicarlca (Weeping Beech) Salix babylonica and other species (Weeping Willow)		Fagus sylvatica pendula (English Weeping Beech)
20-40'	Salix niobe (Weeping Willow) Juniperus communis oblonga pendula (Juniper)	Morus alba pendula (Weeping Mulberry)	
12-20'	Prunus subhirtella pendula (Weeping Cherry) Sorbus aucuparia pendula (Weeping Mountain Ash)	Cornus florida pendula (Weeping Dogwood)	
6-12'	Forsythia suspensa (Weeping Forsythia)	Rosa multiflora (Japanese Rose) Rosa setigera (Prairie Rose)	Tsuga canadensis pendula (Weeping Hemlock) Tsuga canadensis Kelsey (Kelsey's Weeping Hemlock)
3-6'	Cotoneaster salicifolia floccosa (Willow-Leaved Cotoneaster)	Abelia grandiflora (Glossy Abelia) Berberis triacanthos (Barberry)	Taxus baccata repandens (Spreading English Yew) Tsuga canadensis pendula (Weeping Hemlock)

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM
LIGHT TO DARK (*Continued*)

BROAD AND SPREADING (with trunks exposed through foliage)

HEIGHT	LIGHT	MEDIUM	DARK
50' plus	Platanus occidentalis (American Planetree)	Quercus alba (White Oak)	Gymnocladus dioica (Kentucky Coffeetree)
	Gleditsia triacanthos (Honeylocust)	Quercus macrocarpa (Mossycup Oak)	Quercus rubra (Red Oak)
	Populus alba (Poplar)		
40-50'	Cladrastus lutea (Yellow Wood)	Phellodendron sachalinense (Cork Tree)	Pinus thunbergii (Japanese Black Pine)
	Salix alba (White Willow)	Celtis occidentalis (Hackberry)	Pinus strobus (White Pine)
20-40'	Malus (Common Apple)	Phellodendron Chinense (Chinese Cork Tree)	
	Magnolia soulangeana (Saucer Magnolia)	Chionanthus virginica (Fringe Tree)	
	Sorbus decora (European Mountain Ash)	Prunus avium (Common Cherry)	
	Halesia tetraptera (Silverbell Tree)		
12-20'	Caragana arborescens (Pea Tree)	Cornus florida (Flowering Dogwood)	Pinus montana (Swiss Mountain Pine)
	Amelanchier laevis (Shadblow)	Magnolia glauca (Sweetbay)	Cercis canadensis (Red Bud)
	Laburnum alpinum (Golden Rain Tree)		Viburnum sieboldi (Siebold's Viburnum)
	Albizia julibrissin		
6-12'	Enkianthus campanulatus (Red Vein Enkianthus)		
	Myrica carolinensis (Bayberry)		
	Euonymus yedoensis (Yeddo Euonymus)		Pinus mughus (Mugho Pine) Rhododendron hybrids
3-6'		Cotoneaster divaricata (Spreading Cotoneaster)	Kalmia latifolia (Mountain Laurel)
		Paeonia suffruticosa (Tree Peony)	

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM
LIGHT TO DARK (*Continued*)

ROUND OR OVAL (more solid with regular outline)

HEIGHT	LIGHT	MEDIUM	DARK
50' plus	<i>Acer Saccharum</i> (Sugar Maple)	<i>Aesculus hippocastanum</i> (Horse Chestnut)	<i>Acer platanoides</i> (Norway Maple)
	<i>Acer pseudoplatanus</i> (Sycamore Maple)	<i>Prunus sargentii</i>	<i>Tilia vulgaris</i> (European Linden)
	<i>Catalpa speciosa</i> (Western Catalpa)	<i>Fagus americana</i> (American Beech)	<i>Fagus sylvatica</i> <i>riversi</i> (River's Beech)
40-50'	<i>Acer rubrum</i> (Swamp Maple)	<i>Tilia cordata</i> (Littleleaf Linden)	<i>Tilia euchlora</i> (Linden)
	<i>Betula alba</i> (White Birch)	<i>Fraxinus Lanceolata</i> (Ash)	<i>Magnolia acuminata</i> (Cucumber Magnolia)
			<i>Carpinus betulus</i> (European Hornbeam)
20-40'	<i>Sorbus aucuparia</i> (European Mountain Ash)	<i>Aesculus carnea</i> (Red Horsechestnut)	<i>Pinus montana</i> (Swiss Mountain Pine)
		<i>Cercidiphyllum japonicum</i> (Katsura Tree)	
		<i>Crataegus mollis</i> (Downy Hawthorn)	
12-20'	<i>Crataegus pruinosa</i> (Frosted Hawthorn)	<i>Acer tatarica</i> (Tartarian Maple)	<i>Euonymus europaeus</i> (European Burning Bush)
	<i>Malus arnoldiana</i> (Arnold Crab)	<i>Cornus florida</i> (Flowering Dogwood)	<i>Cornus mas</i> (Cornelian Cherry)
	<i>Malus floribunda</i> (Japanese Crab)	<i>Syringa japonica</i> (Japanese Tree Lilac)	<i>Ilex opaca</i> (American Holly)
	<i>Sorbus decora</i>		
6-12'	<i>Hibiscus syriacus</i> (Shrub Althea)	<i>Magnolia stellata</i> (Star Magnolia)	<i>Calycanthus floridus</i> (Sweet Shrub)
	<i>Berberis vernae</i> (Verna Barberry)	<i>Berberis dielsiana</i>	<i>Vaccinium corymbosum</i> (High Bush Blueberry)
	<i>Lonicera fragrantissima</i> (Winter Honeysuckle)		

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM
LIGHT TO DARK (*Continued*)

HEIGHT	LIGHT	MEDIUM	DARK
3-6'	<i>Thuja occidentalis</i> <i>globosum</i> (Globe Arborvitae)	<i>Azalea poukanensis</i> (Korean Azalea)	<i>Pinus mughus</i> (Mugho Pine)
		<i>Euonymus alatus compacta</i> (Dwarf Burning Bush)	<i>Ilex crenata</i> <i>microphylla</i>
1-3'	<i>Viburnum opulus nana</i>	<i>Berberis thunbergii</i> <i>minor</i> (Box Barberry)	<i>Taxus canadensis stricta</i> (Upright Canada Yew)

IRREGULAR AND PICTURESQUE

50' plus	<i>Gleditzia triacanthos</i> (Honeylocust)	<i>Robinia pseudoacacia</i> (Common Locust)	<i>Pinus strobus</i> (White Pine)
	<i>Quercus montana</i>	<i>Acer rubrum</i> (Swamp Maple)	<i>Pinus nigra</i> (Austrian Pine)
	<i>Gymnocladus dioica</i> (Kentucky Coffeetree)		<i>Fagus sylvatica pendula</i> (Weeping Beech)
40-50'	<i>Ginkgo biloba</i> (Maidenhair Tree)	<i>Sassafras albidum</i> (Sassafras)	<i>Pinus densiflora</i> (Japanese Red Pine)
	<i>Juglans regia</i> (English Walnut)	<i>Betula nigra</i> (Black Birch)	<i>Pinus sylvestris</i> (Scotch Pine)
	<i>Ailanthus glandulosa</i> (Tree of Heaven)		
20-40'	<i>Aralia spinosa</i> (Hercules Club)	<i>Malus tneifera</i> (Tea Crab)	<i>Pinus thunbergii</i> (Thunberg Pine)
12-20'	<i>Halesia carolina</i>	<i>Cydonia</i> (Common Quince)	<i>Oxydendron arboreum</i> (Sourwood Tree)
	<i>Acer ginnala</i> (Amur Maple)	<i>Prunus americana</i> (American Plum)	<i>Cercis canadensis</i> (Red Bud)
6-12'	<i>Malus sargentii</i> (Sargent Crab)		
	<i>Rosa hugonis</i> (Hugo's Rose)	<i>Ilex verticillata</i> (Black Alder)	<i>Taxus cuspidata</i> (with pruning)
		<i>Hamamelis vernalis</i> (Witchhazel)	

BRIEF DATA ON MAJOR PLANT FORMS IN VALUE FROM
LIGHT TO DARK (*Continued*)

HEIGHT	LIGHT	MEDIUM	DARK
3-6'	<i>Juniperus chinensis</i> <i>pfitzeriana</i> (Pfitzer's Juniper)	<i>Cotoneaster dielsiana</i>	<i>Cotoneaster divaricata</i> (Spreading Cotoneaster)
		<i>Berberis julianae</i> (Evergreen Barberry)	<i>Juniperus sabina</i> (Savin Juniper)
1-3'	<i>Juniperus chinensis</i> <i>sargentii</i> (Sargent Juniper)	<i>Juniperus communis</i> <i>depressa plumosa</i> (Spreading Juniper)	<i>Thuja occidentalis</i> Little Gem (Little Gem Arborvitae)

A SHORT LIST OF DECIDUOUS MATERIAL INTERESTING FOR
WINTER CHARACTERISTICS IN NORTHERN GARDENS *

All trees of good form and branching structure: especially Oaks, Swamp Maples, Elms, Sassafras, Tupelo, Dogwoods, Hawthorns, Apples, Crab-apples, Walnuts, Sycamores, and Magnolias.

Material with colored bark or twigs:

<i>Acer Pennsylvanicum</i> —green bark stripped white.	<i>Amelanchier canadensis</i> —gray stripped bark.
<i>Betula alba</i> and <i>papyrifera</i> —white bark.	<i>Cornus paniculata</i> —gray bark.
<i>Betula nigra</i> —reddish bark.	<i>Cornus stolonifera lutea</i> —yellow branches and twigs.
<i>Platanus orientalis</i> —greenish white bark.	<i>Cornus alba-sibirica</i> —coral branches and twig.
<i>Salix vitellina aurca</i> —yellow branches.	<i>Cornus Amomum</i> —purple twigs.
<i>Salix vitellina britzensis</i> —reddish branches.	<i>Kerria japonica</i> —green stems.
<i>Ulmus pumila</i> —Silvery branches and twigs.	<i>Forsythia viridissima</i> —green stems.
<i>Fagus americana</i> —Gray trunk and branches.	<i>Rosa lucida</i> —reddish branches and twigs.

Shrubs with berries that persist all winter.

<i>Berberis Thunbergi</i>	<i>Symphoricarpos vulgaris</i>	<i>Viburnum dilitatum</i>
<i>Myrica cerasifera</i>	<i>Symphoricarpos Chienaulti</i>	<i>Crataegus Oxyacanthus</i>
<i>Rhodotypos kerriodes</i>	<i>Viburnum americanum</i>	<i>Crataegus Crus-galli</i>
<i>Rosa multiflora</i>	<i>Viburnum Opulus</i>	<i>Crataegus coccinea</i>

* List by Stanley Underhill, Landscape Architect.

SIZES OF AREAS FOR POPULAR GAMES AND SPORTS †

NAME	PLAY AREA DIMENSIONS (In feet)	USE DIMENSIONS (In feet)
Archery	Various, 90-300 in length	50 (min.) x 450 (max.)
Badminton	17 x 44 (single) 20 x 44 (double)	25 x 60 ✓ 30 x 60
Basketball (men)	35 x 60 (min.) 50 x 94 (max.)	60 x 100 (average)
“ (women)	45 x 90	55 x 100
Boecie	18 x 62	30 x 80
Bowling Green	14 x 110 (1 alley)	20 x 120
Box Hockey	4 x 10	16 x 20
Clock Golf	Circle 20' to 24' in diameter	30' Circle
Croquet	30 x 60	30 x 60
Deck Tennis	12 x 40 (single) 18 x 40 (double)	20 x 50 26 x 50
Hand Ball	20 x 34	30 x 45
Hand Tennis	16 x 40	25 x 60
Horseshoes (men)	Stakes 40' apart	12 x 50
“ (women)	Stakes 30' apart	12 x 40
Paddle Tennis	16 x 44 (single) 20 x 44 (double)	28 x 60 32 x 60
Quoits	Stakes 54' apart	25 x 80
Roque	30 x 60	30 x 60

† From *The New Play Areas*, edited by George Butler, published by A. S. Barnes & Co.

NAME	PLAY AREA DIMENSIONS	USE DIMENSIONS
	(<i>In feet</i>)	(<i>In feet</i>)
Shuffleboard	6 x 52	10 x 64
Softball	60' diamond	250 x 250 (min.)
Table Tennis	5 x 9	12 x 20
Tennis	27 x 78 (single)	50 x 120
	36 x 78 (double)	60 x 120
Tether Tennis	Circle 6' in diameter	20 x 20
Volley Ball	30 x 60	50 x 80

INDEX

- Adams and Prentice, 72
 advice, less costly than mistakes, 260ff.
ajuga reptans, 285
 Allen, Nellie B., 270
 American Gas Association, 40
 American Gothic, 87, 215
ampelopsis heterophylla, 92
 Alvarado, Pedro de, 288
 Andalusia, 290
 Aptos, 328
 arbor, 144, 280; cantilevered, 148, 264; dining, 231, 237, 238
 architect's own story, 129ff.
Architectural Record, 175
arenaria caespitosa, 122, 294
 "Around the Calendar in a Symphonic Planting Scheme," 276ff.
 Atlanta, 22, 317, 318
 backyard, 94ff.; as a volume of space, 94; partitions in, 94f.; arrangement for use and beauty, 95; need for greenery in, 95; play space in, 95; place for refuse cans and clothes yard in, 95f.; recreational, 96f.; combination play area and dining terrace in, 98; trees in, 98ff.; sunken terrace in, 101; in New York City, 101ff.; ground cover in, 102; in relation to house, 103ff.; in England, 105ff.; old traditions and new ideas in, 107f.; patterned gardens in, 109ff.; use of mirrors in, 112; suburban, 120; privacy and accessibility in, 120; paths and pavings in, 122f.; natural enclosures, walls and fences in, 123
 badminton courts, 179
 Bakersfield, 17
 balance without symmetry, 119f.
 Balboa Island, 96, 222
 bamboo pavilion around a pool, 219, 285
 barbecue next a swimming pool, 178; at Palm Springs, 229
 basements, high, 35ff.; 127
 Bashford, Katherine, 258
 Bayside, 300
 Bedini, Vincent, 205
 Bel Air, 17, 59
 Bethel, 309
 Beverly Hills, 22, 130, 245
 birdbaths, 284, 300
 Blue Ridge, 340ff.
 Boutet de Monvel, Bernard, 41ff., 202, 255
 bowling green, a, 183ff.
 Bradley and Church, 167
 brazier, 23
 breaks in a set pattern, 150
 Brewster, 76
 Brookline, 86, 281
 brooks, 309ff.; natural planting around, 311, 334ff.
 Burroughs, Jr., John, 39
 Butler, George, 349n.
 Byers, John, 21, 297
 cacti, 260, 334
California Arts and Architecture, 23, 129
 California pool house, a, 216
 California villa, a, 141ff.
callicarpa americana, 338
 Cambridge, 25, 133
campanula, garganica, muralis, pusilla, 317
 Cape Cod style, 21, 53
 car-port and car shelter, 82ff.
 Catskills, 320
 cellars, 36, 37, 127
cerastium tomentosum, 311
 Chase, Stuart, 188, 193
 Chertsey in Surrey, 196
 children, needs of, 168
 children's play areas, for ages six to twelve, 158; planning for changing needs in, 158ff.; location of, 160f.; for small children, 161f.; individuality in, 163f.; recreational value of water in, 164f.; tree and play houses in, 164, 165ff.; in and around the house, 168; prize plans for, 170; separated from adult game areas, 176f.
 children's quarters in a modern home, 172; relating interior and exterior plans in, 172f.
 China, gardening in, 309
 Church, Thomas D., 292, 322
 Cicero, 142
 Clark, Cameron, 47, 59
 Colonial style, 74
Concrete Improvements Around the Home, 182
 Confer, Frederick L. R., 177, 179
 Conquistadores, the, 288
 contours of the ground, abstraction of, 115; appreciating, 150; utilizing, 287, 292
 Cook, Captain, 86
cooperia, 293
coprosma Baueri, 274
 Coral Gables, 220, 262
 Cornell, Ralph, 99, 298
 courtyard, a secluded, 153f.
 Cukor, George, 36, 141, 211, 229

- Cullimore, Clarence, 17
 Cummer, Wellington, 78
 Cumrock blocks, 80

 Dallas, 55
 dance floor, open air, 185ff.
daubentonia Tripetii, 274
 Davidson, J. R., 73, 170, 296
 Davies, Wilbur, 98
 Day, Kenneth, 63, 77
 dead-end room, 156
 Dean, Marianne, 31, 215
 deciduous materials in northern gardens for winter effects, 349
 Delehanty, Bradley, 91
 design for modern gardens, axial versus aerial, 114
 designers, what they need to know, 128f.; how to get the most out of, 129
 Devon, 165
 diagram of outdoor areas, making a, 249
 dining out of doors, 236ff.
 "dogtrot," 28
 Dolena, J. E., 142
 doors, screened, 51ff.
 double walls, 63f.
 Downing, Andrew Jackson, 86
 drive, curving, 69; into the house, 72f.
 Dublin, 301
 duckpond, 324
 duPont de Nemours, 253, 260
 Duxbury, 229

 Eckbo, Garrett, 114ff., 292
 El Greco, 154
 Embury II, Aymar, 11, 31, 215
 enclosures, 123
 entrance facilities, 66ff.; side, 75; to the garden, 76, 120; on a lower level, 77; compact, 82; graciously planned, 91
eryngium aromaticum, 338
 espaliered shrubs and trees, 144, 157, 281f.
 essentials, stick to, 132

 Fairchild, David, 13
 Fairfield, 47
 fireplace, on the screened porch, 223; ready-made, 226; as part of a unit, 227; in a courtyard, 230; hewn from a rock, 232; special technique for connoisseurs, 231ff.; with oven slides, 234f.
 Florida, 337
 flower beds, on terraces, 281; raised, 148, 281f.
 Foster, William Dewey, 33
 fountains and jets, 284, 290, 293, 298, 302
 Frank, Harry C., 45
 French Colonial house, a, 75f.; 160, 195, 250
 French Provincial style, 21, 324
 front yard as an outdoor living room, 133
 furniture to stay outdoors, 155

 games and sports, sizes of areas for, 351
 garage and entrance facilities, 66ff.; in old-style houses, 67; remodeling an old house for, 86ff.
 garages, inside modern homes, 73, 74; "drive-through," 84ff.
 garden house, location of, 242ff.
 garden rooms, location of, 242ff.
 gardens, patterned, 109ff.; standardized formula for, 112ff.; axis in, 114; new gospel for, 114f.; city, 115ff.; suburban backyard, 120; purpose of, 156
genista tinctoria, 273
 Georgetown, 109, 111
 Georgian architecture, 28, 251
 glass, walls of, 48, 59, 63, 135f.; in gardens, 118, 148, 281
 Glenbrook, 187
 Gloucester, 248
 Grieve, Harold W., 181
 Great Neck, 69
 Greek fret motif, 39, 122
 Greek Revival, 29, 128, 262, 318
 Greely, Rose, 39, 109, 111ff., 298
 Green, Frank W., 25, 82
 Greenwich, 33, 230, 323
 grill, outdoor, three requisites for, 223-4; for a patio, 224; primitive, 224ff.; materials for, 227
 Guadalajara, 289ff
gyssophila repens, 329

 Hamilton home, Philip K., 51, 257
 hand ball court for winter use, 187
 Harris, Harwell Hamilton, 84, 85
 Haverford, 234
 Hawaiian room, a, 59f.
 Hayes, Helen, 181, 213, 242
 heating units, modern, 127, 136
 hedges, various uses of, 146, 193, 259, 264, 279, 282, 284, 302
hedychium, 293
 heliophiles, 193
 Hentz, Adler and Shutze, 263, 317
 Herculaneum, 141
 Hewitt, Edward Shepard, 102, 151, 323
 Hickia, 60
 Hill, Walter C., 340ff.
 Hillsborough, 291
 hillsides, 316ff.
 Homsey, Victorine and Samuel, 253
 honeycomb house plan, 172
 Hopping, Daniel, 75
 horse and carriage days, change from, 66
 house, adjusted to the site, 257
 house and grounds, necessity of organizing together, 125ff.; factors in locating, 132ff.
 Houston homes, 13, 29, 236, 259
hymenocallis, 293
 Humphrey, Richard S., home of, 86ff., 281ff., 334ff.

- ilex*, *Bufordii*, 281; *bullata*, 267; *vomitorea*, 266
iris cristata, 313
 Irvin, Mr. and Mrs. Rea, 312
 Jacksonville, 78, 279
 Jahn, Clarence W. and Edwin A. Wagner, 170
 Kelley, H. Roy, 17, 59, 98, 258
 Kent, 24
kerria Japonica, 273
 Kiley, Daniel Urban, 284
 King, Mrs. Frances, 280
 Kirby, Donald Beach, 96, 183
 Knight, Howard B. Knight, 57
 Knoblock, Edward, 105
 Koch, Carl, 62, 133ff.
 Krutch, Joseph Wood, 240
 La Fontaine, Rosalind Spring, 190
 Lamson, Mary Deputy, 181, 242, 269
 Lanai, 59f.
 landscape design, interspatial vistas in, 94; outlooks in, 111; standardized formula in, 112; principles in, 140; requirements in, 157; how to analyse plant forms for, 252ff.; advice about, 125, 260; based on trees and shrubs, 282ff.
lantana radiation, 333
 lath house for special interests, 246
 lattice designs, for loggias, 23; for a porch, 31; in a fence, 123; in a pergola, 216; for teahouses, 245
 Laurens, Henry, 307
 Lescaze, William, 63, 122
liquidambar styraciflua, 251
liriodendron tulipifera, 251
 Lloyd's Harbor, 151
 Locust Valley home, a, 90, 91, 259
 loggias, 6, 9, 12, 27, 29, 153, 207, 238
 London, 106, 107
 London, Ruth, 238, 306
 Long Island Farmhouse, a, 151ff.; 262
 Los Angeles, 216
 Louisiana garden, 293
 louvered walls, 194
 low hedges, reasons for, 259
 Magazine of Art, 114
magnolia grandiflora, 251, *stellata*, 274
 major plant forms, brief data on, 343ff.; columnar, 343; horizontal, 344; pendulous, 345; broad and spreading, 346; round or oval, 347; irregular and picturesque, 349
 Manchester-by-the-Sea, 242, 329
 Matcham, Charles O., 230
 Matschat, Cecile Hulse, 5
 McKay, William, 265
 McGrath, Raymond, 196
melaleuca leucadendra, 13
 Mepkin Plantations, 307, 327
Mexican Plants for American Gardens, by Cecile Hulse Matschat, 5
 Miami Beach, 9, 12, 195; fireplace on a porch at, 223
miehelea fuscata, 274
 Middlebourne, 232
 Middletown, 35
 Mignon, 63
 mill pond, 311ff.
 Milledgeville, 263
 Miller, Harry L., 190
 mirrors, use of, in gardens, 112
 model, advantages of, 150, 250
 modern house, a, in Cambridge, Massachusetts, 133ff.
 Modern Regency, 41, 73
 modern trends of living, viii-ix
 Moncks Corners, 307
 Monterey style, 18ff., 29, 67
 Moors, Moorish, 290
 Morales, Ignacio, Dias, 289
 motor car approaches, 68ff.
 motor court, 68
 Motor Home, at the New York World's Fair, 72f.
 Mount Kisco, 270
 moving a Long Island farmhouse, 151
 multiple-use court, 180
myrica cerifera, 279
Nation, The, 193
 Neutra, Richard J., 56, 62, 331ff.
 New Canaan, 48, 242
 New England houses, 31, 67
 New Hope, 77, 195
 New Orleans, 6, 29, 250
 Newtown, 311
 New York City backyards, 101ff., 104, 124
 New York World's Fair, 72, 165
 Norcross, 10
 Norman French style, 67, 68
 North Carolina home, 227, 340ff.
 North Stamford, 218, 322
 Nyack, 181, 215, 242, 271
 Oak Alley, 267
 oasis in the desert, 329ff.
 octagonal house with four terraces, 41
 old-style houses, garage and entrance facilities in, 67f.
 Oregon, 222, 325
osmanthus fragrans, 266
 outdoor grills, 222ff.; three requisites for, 222-3
 outdoor rooms, the trend in, 3-4; materials and furnishings for, 4-5; patios as, 5-6; porches as, 31; terraces as, 33ff.; front yards as, 133; humanizing backyards as, 94ff., 115; privacy and accessibility for, 67, 120; surrounding a house with, 151; modern example of, 294ff.

- Pachysandra terminalis*, 102
 paddle tennis court for summer and winter use, 187
 Palladian windows, 63
 Palm Beach, 9, 22, 25, 27, 41, 207, 236, 255
 Palm Springs, 230, 329, 334
 Pasadena, 258, 266
 paths and pavings, 109, 111, 122; circulating, 151; surfaced for children's use, 160, 163, 172; need for, 249ff.
 patio, as an outdoor room, 5ff.; reason for, 7-8; difference from walled garden, porch or terrace, 8; house plans built around, 8ff.; with vistas, 10ff.; designed in units, 13ff.; Mexican style of, 17; of a Monterey house, 17f.; variations of, 21f.; and the climate, 22, 24; fan-shaped, 25
 Pawling, 202
Pencil Points, 146, 150
pentstemon scouleri, 306
 pergola between bathhouses, 215ff.; Victorian, 271; screened, 302
philadelphus Virginalis, 231; *Gordonianus*, *Lewisii*, 317
phlox subulata, 313
 picnic tables and built-in dining facilities, 239ff.
 Piedmont, 292
 ping-pong, a porch for, 183
 plant ecology, 311
 plant forms and design value, 252ff.
 planting, to fill in a drop in grade, 39; in the terrace, 43f.; for composition without upkeep, 154, 249ff.; laying out spaces for, 250; importance of trees in, 251; entrance, 255; around foundations, 257, 260; for permanent effects, 258-9; for accent, 260; to suit the house, 262; to emphasize architectural lines, 262ff.; at the front of the town house, 264ff.; against walls, 267; to be seen from inside, 267; for the future, 269; for fall and winter effects, 272ff.; native material in, 279, 311; around terraces, patios and porches, 279; small-scale, 280; a dynamic plan for, 286
 play areas, sizes of, 350
 play courts for year-round use, 192
 playhouse, 165ff.
 playrooms, as guest rooms, 167f.; adapted to later use, 174; indoor and outdoor on an unused slope, 123, 190ff.
 play terraces, 170
 Pliny the Younger, 142
 plywood, shelters of, 181, 243ff.
podocarpus macrophylla, 279
 Polevitzky and Russell, 219ff.
 Polish Pavilion, at the New York World's Fair, 165
polygonum auberti, 105
 Pompeii, 141
 Pompeian villa, in a modern-classic house, 142
 ponds, for skating, 188; for swimming, 217f.
 pool, as part of the house, 219; for swimming, shape and depth of, 202; width and length of, 203; incidental considerations of, 203; lighting of, 203ff.; for wading, 204; looking down on, 207ff.; making unit for livable, 211; setting of, 213, 290ff.; raised, 292ff.; Shirley Temple's, 294; for modern outdoor rooms, 296-7; shaded, 297f.; against a brick wall, 298; miniature, 298f.; in the Bishop's Garden in Washington, D. C., 304; natural, 304; lead as foundation for, 304; built into rocks, 304ff.; reflecting, 284, 306ff.; construction of, 309
 pool house, a, for simple living, 216
 porch, types of, 28ff.; modern, as an outdoor living room, 31; woodshed designs for, 31f.; covered passageway as, 33; convertible, 47; protected, 48; screened, 50f.; in a Cape Cod house, 53; projecting, 55; horizontal metal framework on, 55f.; the core of a house, 57f.; fireplace on, 223; sleeping, 58; sun, 58f.; for ping-pong, 183; for games, 189f.
 Port Chester, 74, 255
 Portland Cement Association, 180
potentilla fruticosa, 315
 Purchase, 31, 215
 ramps, 116, 146, 284, 286
 recreation, facilities for, 175ff.: 285
 Redding, 183, 188
 remodeling an old house, 86
 retreats, purpose of, 241ff.; for special interests, 242; attractive to birds, 302
 Robb, J. Hampdon and Gordon Allen, 86
 Roentgen, Engelbert, 320
 Romans, the, 34; what we have in common with, 142ff.
 rooftrees, 251
 Rose, James C., 45, 86, 146ff., 276ff., 342
 Rucker, Ned S., 179
 Rudin, Paul, 242
 Rye, 123, 190
 sand garden, 285f.
 San Francisco, 118, 274
 San Merino, 98, 183
 Santa Cruz Mountains, 199
 Santa Monica, 73, 84, 162, 294
 San Ysidro, 23
 Schoen, Eugene and Sons, 3, 56
 Schoeppl and Southwell, 55; Schoeppl, Carlos, 186
 Scituate, 53
 Scott and Teegen, 255
 screened doors, 51ff.
 screened porches, 50ff.; monel screen for, 221
 separate retreats, advantages of, 155f.
 Sharon, 167
 Sheets, Donn Jefferson, 37

- shelters, 181ff.; 241ff.
 Shilowitz, Joseph, 41, 68, 281
 Shipman, Ellen, 125
 shrubbery around the foundations, 33; 256-7
 side entrance, advantages of, 75f.
 Silver Lake, 45
 Siple, Allen, 216
 skiing, slopes for, 188
slalom, 189
 Slide Mountain, 320
 sloping lot, plan for, 78ff.
Solandra guttata, 267
 South Hartford, 280
 South Miami, 57
 "space garden," 94
 spaciousness, in a modern house, 133ff.; in a garden, 307
 Spanish style, 58
 Spaulding, Sumner, 22-3, 129ff., 194, 238
spirea, prunifolia, 274; *Vanhouttei*, 317
 Spokane, 232, 304, 316
 St. Francis, 302
 Staats, H. P., 24
 Stamford, 211
 Stanford, University, 82, 172
 Staub, John F., 13, 28, 58, 238, 305
 Steele, Fletcher, 206
 steps, 90
 Stencken, John, 41, 170
 Stevenson, Harvey and Eastmann Studs, 104
stoeps, Dutch, 28
 Stone, Edward D., 62, 133, 307, 327
 Stothart, Herbert, 73, 162, 195, 207, 209, 294
 Sturtevant, Butler, 291
 summer houses, 241ff.
 sun-bathing, facilities for, 150; 193ff.
 sun decks, 75, 78, 195
 Sundleaf, Richard, 325
Sunset Magazine, 160
 synthetic versus the organic home, 126
 swimming pools, problems in constructing, 201, 203; shape and depth of, 202f.; width and length of, 203; lighting of, 203; children's, 204; as part of a livable unit, 211
 tea houses, 244
 tea terraces, 69, 132, 151
 Temple, Shirley, 240, 294
 tennis court, for a sports-minded family, 176; upkeep of, 178f.; good-looking back stops for, 180f.; a shelter next to, 181ff.; flooding for skating, 187ff.
 terrace, as an outdoor room, 33ff.; next a basement playroom, 39f.; continuous, 40; openness of plan with interiors, 43; planting on, 43ff., 280; projecting, 45; unsymmetrical, 45ff.; disadvantages of, 47; secluded, 69ff.; to anchor a house to its site, 257; flower beds on, 281f.
The New Play Areas, 349n.
 Thomas, Lowell, 202
 "Thunder-house," 329
 Toombs, Henry J., 10, 51
 Town of Tomorrow, 72
 Treanor and Fatio, 25, 41, 256, 261
 trellis, an unusual, 280
 trees, add dignity, 10; native to Florida, 13, 27, 279, 338; for shade, 21, 107, 163, 244, 281; dictate layout, 80; native hemlock, 92; to suggest partitions and boundaries, 94, 309; as centers of interest, 98; in a clump, 101; for city backyards, 102; to give a three-dimensional quality to areas, 115, 118, 262; for balance, 120; as symbols of organic entities, 127; sparing use of as specimens, 139, 149, 281; as vertical accents, 149; dwarf fruit, 248; choice of, around a house, 250; importance of, to relate the house to the surroundings, 251ff., 279; location of, 252; study the forms of, 254; select large, 256; avenues of, 267, 284; in contrasting combinations, 269; as wind breaks, 269, 279; give coherence to a plan, 269; upkeep of, 272; in winter, 273; in a California patio, 274, 279; for successive garden interest, 274ff.; espalier, 279, 281ff., 318; tailored treatment of, 279; a plan based on, and shrubs, 282ff.; near a brook, 310ff.; next a pond, 312, 323, 324; in Atlanta gardens, 318; how to feature, 322; for a desert setting, 334
 Tryon, a home in, 227, 340
 Tudor style, 21
 Tunnard, Christopher, 196, 207, 281, 323
 Tuscan order, 87
 Tuxedo Park, 63, 68
 Underhill, Stanley, 217, 322, 350n
 Vermont camp, outdoor dining in a, 239
viburnum, burkwoodi, Carlesi, tomentosum, 274; *sieboldi*, 267
 Victorian bathhouse, a, 213ff.
 vistas, patios with, 10
vitis rhombifolia, 145
 vines, 5, 23, 105, 138, 145, 154, 180, 185, 236, 238, 264, 267, 273, 274ff., 281, 329
 walls and fences, 123, 194ff.
 Warm Springs, 51
 Washington, D. C., garden layouts in, 39, 109, 110, 163, 298, 304
 Washington, George, 304
 water in a modern Mexican garden, 289f.; location for, in a setting, 291
 Waverly Oaks, 203, 219; study of the design for, 282ff., 302
 Weed, Robert Law, 2, 9, 13
 wells, 300ff.
 West Hollywood, 141
 Westport, 162, 163, 307

- Wheelock, Ward, 234
Williams, Bradford, 86, 91, 335
Wills, Royal Barry, 53, 128
Wilmington, 260
wind screen, 269, 279, 281
Woodstock, 320
workshed, outdoor living room, and garden
 combined, 247-8
Worman, Hans N., 69
Wright, Frank Lloyd, 82, 172, 252
Wurster, William W., 50, 196, 328
Wyeth and King, 9, 237
Yates, Ruth, 307
Yoakum, Hal, 55
Yoch, Florence, and Lucile Council, 144, 156

Date Due

[illegible]

130300

Designs for outdoor living afa
710G624d



3 1262 03170 6574

